

Entomology Abstracts

Annual Indexes to Volume 13 1982

Q.L

461

E 9853

V. 13

INDEX

1982

h/c

U. C.
FEB 29 1993
LIBRARY

S 4

✓

SN 0013-3932

Cambridge Scientific Abstracts

An annual subscription to Entomology Abstracts includes twelve monthly issues, each containing an Author and Subject Index, and a separate Annual Author and Subject Index sent without further charge to subscribers after completion of the volume. Subscriptions are entered on a calendar year basis only.

Annual subscription rates 1982

Americas	\$375
Rest of the world (air)	£152
Rest of the world (surface)	£140

Two-year subscription rates

Save 5% on a two-year subscription to the 1982 and 1983 volumes. To calculate the two-year rate, simply double the 1982 price above and deduct 5%.

Orders

Orders from or on behalf of subscribers in the various geographical areas shown below should be routed to the appropriate office or sole agent with payments made in the currencies marked:

Western hemisphere

(North, Central and South America — payment in US dollars)

Information Retrieval Inc.,
1911 Jefferson Davis Highway,
Arlington, VA 22202,
USA.

Japan

(payment in yen)

US Asiatic Company Limited,
Tsutsumi Building,
13-12 Shimbashi 1-chome,
Minato-ku, Tokyo 105, Japan.

India, Sri Lanka, Bangladesh, Nepal, Burma, Malaysia, Singapore, Indonesia and Thailand

Universal Subscription Agency Pvt. Ltd.
117/H-1/294-B Model Town,
Pandu Nagar, Kanpur 208005,
India.

Israel

N.P.K. Meida Ltd.,
PO Box 10127,
Tel-Aviv 61101,
Israel.

Rest of the world

(payment in sterling)
Information Retrieval Limited,
PO Box 1,
Eynsham, Oxford OX8 1JJ,
England.

© 1982 Cambridge Scientific Abstracts
All rights reserved by the publisher. No part of this publication may be reproduced or transmitted in any form by any means electronic or mechanical, including photocopying, recording or any information age and retrieval system, without permission in writing from the publisher.

Entomology Abstracts (ISSN 0013-893X) published monthly with an annual index. U.S. \$375.00 per year by Cambridge Scientific Abstracts, 5161 River Road, Bethesda, MD 20816. Second class postage paid at Bethesda, MD. POSTMASTER: Send address changes to Cambridge Scientific Abstracts, 5161 River Road, Bethesda, MD 20816.

Entomology Abstracts

Annual Indexes to Volume 13 1982

Editorial staff

Susan Compton
Mark Meschter

Foreword

Entomology Abstracts

started publication in 1969 and is compiled and published monthly. Each issue contains approximately 750 abstracts together with an author index and a combined taxonomic and subject index. Annual cumulative indexes are published during the following year.

Coverage

In compiling each month's issue, CSA's editorial staff monitors approximately 5,000 primary journals and other source references for papers falling within the scope of Entomology Abstracts.

Subject scope and arrangement of subject matter

The table of contents shows the full scope of the journal. All topics of direct relevance to entomology are covered. Abstracts are allocated to the section (subsection) to which they are most relevant and cross referred to other sections (subsections) where appropriate.

Note: From 1980 (Vol. 11) the table of contents has been revised, to facilitate the location of certain subjects, in particular for behavioral aspects of biology and ecology, and genetics. The subject scope is not affected by these changes.

Using this journal

Full details of the bibliographic data cited for each abstract and of abbreviations used can be found in the first issue of this volume.

Author Index

- Bailey, L. 1033, 5727.
Bailey, P.C.E. 375, 754.
Bailey, R.E. 637.
Bailey, T.E. 4329.
Bailey, W.J. 4652.
Baillly-Choumara, H. 1993.
Baird, V. 6238, 9408.
Bainbridge, S.P. 3460.
Bains, S.S. 5301.
Baird, C.R. 4507.
Baird, R. 2308.
Bajzar, G. 2308.
Bajenov, M.S. 4795, 5557, 6292, 7946, 8599.
Baker, B.S. 7824, 8644.
Baker, E.W. 2026, 3973.
Baker, G.T. 8321.
Baker, J.E. 187, 957, 1762, 1765, 5692, 5817.
Baker, M. 3361.
Baker, N.T. 8056.
Baker, P.B. 65, 1399.
Baker, P.S. 3275.
Baker, R. 1797, 1799, 3710, 8114, 8973.
Baker, R.H. 1902, 7602.
Baker, R.L. 3056, 7880.
Baker, R.R. 8262.
Baker, R.T. 3816, 4415.
Baker, T.C. 420, 2763, 3349, 4913, 5843.
Baker, W.K. 1558.
Bakheta, D.R.C. 5363.
Bakke, I.S. 8961.
Bakke, J.D. 7336.
Bakke, J.D. 7391.
Bala Agarwal, S. 9039.
Balakrishnan, S. 9003.
Balaraman, K. 654, 6599.
Balasubramanian, M. 1027, 5329.
Balasubramanian, N.K. 2948, 2949.
Bala, F. 7549.
Balazuc, J. 9470.
Balciunas, J.K. 2204.
Balda, R.P. 1284, 6854.
Baldinger, J. 6917.
Baldizzone, G. 3223.
Baldwin, E. 8569.
Baldry, D.A.T. 1334, 1343, 1345, 2936.
Baldwin, A.S. 3075.
Baldwin, F.T. 2747.
Bale, J.S. 1792.
Balevina, K.M. 3462.
Ball, E.E. 136, 138.
Ball, H.J. 3817, 6742.
Ball, J.C. 362.
Ball, M. 8426.
Ball, S.G. 2983.
Ball, S.J. 5754.
Ball, S.J. 5332, 8557, 9335.
Ballester, J.P.G. 3332.
Baloch, A.A. 6849.
Balsbaugh, E.U., Jr. 2208, 7126, 8769.
Banash, S.E. 8472.
Banash, M.G. 4597, 8834.
Banc, A.G. 7140.
Banerjee, B. 4574.
Banerjee, K. 2937.
Banerjee, S.K. 6946.
Bang, Y.H. 644, 6062.
Bank, W.A. 2192, 2193.
Bano, K. 5248, 9129.
Bannode, C.P. 5043.
Bar-Sela, S. 3700.
Barak, A.V. 3783.
Baranovsky, P.M. 9477.
Baranovsky, R. 4777, 7092, 7093.
Baranovsky, R.M. 4744.
Baraud, J. 1600, 8764.
Barbagallo, S. 3722.
Barber, D.R. 4355.
Barber, J.T. 7334.
Barber, L.R. 2982.
Barber, M. 225, 242, 2601.
Barber, R. 6632.
Barbieri, C.L. 3032.
Barbosa, G.C.F. 6127.
Barbosa, J.C. 6080, 6153.
Barbosa, P. 5980, 6813, 8326.
Barclay, H. 714.
Barclay, J.H. 2943, 5341, 6077, 7065, 8465.
Bardinelli, C.M. 3353.
Bardinelli, M. 6532, 7060.
Bardinelli, C.S. 382, 1934, 2003.
Barg, L. 5029.
Barham, C.S. 5099.
Barham, J. 5055.
Barola, L.A. 1096, 3021, 3765, 9026.
Bartelle, J. 8558.
Barja, P. 8195.
Barker, D.L. 8912.
Barker, J.F. 3375.
Barker, J.F. 3268, 3303, 5491.
Barker, P.S. 8515.
Barker, R.W. 4758, 4997.
Barker, S.J. 5106.
Bartlin, M.R. 2509, 8113.
Barlow, F. 1072, 3122.
Barlow, S.J. 8061.
Barlow, N.D. 232.
Barlow, T. 6916, 6936.
Barnard, D.R. 442, 3586, 4508, 6890, 8393.
Barnard, J. 8502.
Barnes, A.M. 637, 3655.
Barnes, M.M. 1391, 2240, 5347, 6105, 6170.
Barnett, J.L. 6776.
Barnett, O.W. 8524.
Barnett, T. 4662.
Barnett, W.W. 733, 3725.
Barnes, R.J. 286, 612, 3736, 5626.
Barr, A.R. 1542, 7046.
Barr, T.C., Jr. 1488.
Barrao, D.A. 3548.
Barrett, C.C. 1681.
Barrett, F.M. 5679.
Barrett, R.A. 6217.
Barrett, R.E. 4743.
Barretto, M.P. 5283.
Barriott, A.T. 2806.
Barriouneuv, D. 3948.
Barritt, H.B. 554.
Barron, S.J. 8137.
Barrows, E.M. 525, 2032.
Barry, D. 4625, 6899, 7053, 9272.
Barry, J.D. 3674.
Barson, G. 5776.
Bartell, R.J. 2600.
Bartell, S.M. 7813.
Bartell, R.J. 3495.
Barth, A. 265, 3357.
Barth, F.G. 3542.
Barth, R.H., Jr. 7296.
Barkowski, J. 283, 2629.
Barkowski, J. 2339, 4221, 8364, 8667.
Bartlett, P.W. 1440, 2096, 6896, 6898.
Bartley, J.A. 2906.
Barton, N.H. 3111.
Bartsch, I. 3966, 6343, 6351, 7147, 8718.
Barwig, B. 4147.
Barvina, S.V. 1378.
Basarak, D.C. 1022, 8315.
Basavanna, G.P.C. 7458.
Basavar, L. 8195.
Basdow, T. 1394, 6859, 9339.
Basham, H.G. 2648.
Bashar, M.A. 8280.
Baskin, R. 4242.
Baskin, C.C. 6791.
Baskin, M.J. 6791.
Basmacil, S.M. 6891.
Bass, J.A. 1009.
Bass, J.A.B. 1809, 7012.
Bass, M.H. 229.
Bassiony, M.F. 8193.
Bassman, J. 5349.
Bassuk, J.A. 7473.
Basu, A.K. 1444.
Basu, C.R. 7160.
Basuki 8217.
Batesman, M.A. 3741, 3757.
Batra, C.P. 663.
Batra, R.C. 551, 7251, 7718, 7790.
Batra, S.W.T. 3029.
Batru, R. 7291.
Batson, S.S. 5232.
Batta, R. 3189.
Battenfield, S.L. 7928.
Batz, H. 4135.
Batzli, G.O. 4404.
Bauer Vianne, M.J. 8735, 8736.
Baub, D.J. 2100.
Bauer, T. 498, 4359.
Baum, B. 3189.
Bauman, J.G.J. 2304.
Baumann, E. 5674, 5698.
Baumann, F. 6534.
Baumann, G.L. 8563.
Baumann, R.W. 42.
Baumgartner, J.U. 2870, 2886.
Baumgartner, J. 6918.
Baumhoyer, A. H. 1294.
Baust, J. 6016.
Baust, J.G. 238, 956, 1189, 2603, 2730, 4144, 4254, 8107.
Baute, M.A. 2223, 2224.
Baute, R. 2223, 2224.
Bautz, E.K.F. 2586, 3073.
Bavinsky, S.G. 6245.
Baxendale, F.P. 1915.
Baxter, J.A. 9051.
Baxter, J.R. 1970.
Bay, D.E. 1989, 2116, 2692, 4481, 5279.
Bay, S.A. 7822.
Bayev, A.A. 9381, 9382.
Bayvel, A.C.D. 3746.
Be, C.H. 2493.
Beach, J.H. 3592.
Beadle, J.C. 3266, 5664.
Beadles, M.L. 2172.
Beaman, N.J. 6862.
Bean, D.W. 5075.
Beattie, A.J. 2837.
Beattie, D.M. 751.
Beaty, B.J. 7386.
Beaucoum-Saguer, F. 3993, 4546.
Beauchamp, J.C. 4188.
Beavers, J.B. 5147, 5669.
Beavis, W.D. 604, 8374.
Bebbington, C.R. 3502.
Becerra Martell, C. 8045.
Becerra, C. 8336.
Becchini, E.J. 2164, 6145.
Bechtel, R.C. 3155.
Beck, S.D. 5075.
Beckage, N.E. 3500, 5935, 8328.
Beckenbach, A.T. 6279.
Beckendorf, K.C. 6250.
Becker, C.J. 9499.
Becker, J. 877.
Becker, J.L. 1529.
Becker, W.A. 124.
Beckwith, R.C. 5996.
Bedding, R.A. 2188, 2207, 7767.
Bednyi, V.D. 6930.
Beeple, C.C. 724, 6147.
Bedi, C. 8025.
Beeman, R.W. 5802.
Beenakkers, A.M.H. 893, 1767, 3328.
Beenewinkle, K.R. 1684, 1685, 1937.
Beetson, B.R. 6889.
Beevens, M. 423, 3357.
Beggs, P.S. 3354, 5871.
Beggmann, J.G. 669, 1483.
Begley, J.W. 8237.
Begum, A. 8280.
Behan-Pellencier, V.M. 7933.
Behan, A. 8646.
Behrens, W. 8093.
Beier, J.C. 1377, 4482, 5857.
Beig, D. 5097, 7001, 8243.
Beiko, V.B. 6695.
Beiles, A. 1561.
Bejer, B. 5308.
Beklenichev, K.V. 3459.
Belava, M. 51, 1283.
Belavadi, V.V. 5425.
Belcher, D.W. 5957.
Belda Neto, F.M. 5022.
Bellow, K. 932, 5447.
Belay, J.R. 1284, 6854, 9183.
Belk, R. 3145.
Belkin, J.N. 6407.
Bell, A.E. 385.
Bell, C.H. 1045, 1127.
Bell, D.S. 9303.
Bell, H.T. 448.
Bell, J.F. 229.
Bell, J.V. 735, 9134.
Bell, P.D. 1921.
Bell, R.A. 1100, 3702, 8008, 8145.
Bell, T.R. 7923.
Bell, W.J. 2760, 4307, 5311, 5099, 5119, 5544, 6336.
Bellas, T.E. 2600.
Belles, C. 5269.
Belles, J. 1604, 4917.
Bello, H.R. 4206.
Bello, J. 4206.
Bellonick, S. 8007.
Bellows, T.S., Jr. 604, 8371, 8575.
Bellotti, R. 4716.
Belokon, E.M. 8955.
Belote, J.M. 7824.
Belton, P. 5081.
Belvadi, V.V. 5257, 5365.
Belyaeva, E.S. 2320.
Belyanina, S.I. 4695, 8656.
Belyavsky, A.V. 6245.
Ben-Dov, Y. 2437, 2442, 8870.
Ben-Elihu, M.N. 224, 974.
Benz, G. 3070.
Benz, E. 5262.
Benedek, I. 181, 900, 930.
Benedict, J.H. 1903.
Benjamin, M.Q. 5458.
Benes, K. 1653, 4875, 6438, 8829.
Benest, G. 6824.
Benevicius, L.A.D. 3724.
Bengtsson, B.-E. 3850.
Benitez Rodriguez, R. 8335, 8337.
Benitez-Rodriguez, R. 8046.
Benjamin, D.M. 603, 623, 2016, 4333, 8305.
Benn, M.H. 1933.
Benner, J.C. 8271.
Bennett, C.A. 1969.
Bennett, F.D. 4744.
Bennett, G.F. 9014.
Bennett, G.W. 8436.
Bennett, S.N. 9260.
Bennich, H. 303, 8952.
Bensch, C. 8907.
Benson, R.B. 2516.
Bentley, B.L. 6215.
Bentley, M.D. 1897.
Bentley, M.M. 7857, 7858.
Bentley, W.J. 6907.
Benton, C.V. 1329.
Bentur, J.S. 9136.
Benz, G. 454, 1119, 5171, 5831.
Beppu, K. 4463.
Bernaldo, H. 4173.
Berbee, J.E. 8305.
Berberet, R.C. 6962.
Berchold, W. 6918.
Berchold, R.L. 5310.
Berenbaum, M. 2079, 5968, 8247.
Berezina, L.K. 8985, 9250.
Berg, C.C. 5208.
Berger, E.M. 168, 184, 7835.
Berger, P. 9472.
Bergman, D. 9026.
Berg, B.J. 2584, 1614.
Bergstrom, G. 3351, 3384.
Bergstrom, G. 920, 3075, 4990.
Berntson, C.W. 214, 400, 425, 505, 2216, 4313, 4912, 6723, 8484, 8491.
Berkeley, A. 5216.
Berger, D. 4216.
Berlin, G.D. 5684.
Berlocher, S.H. 2336.
Berman, E.L. 9043.
Bernard, C.P. 1369.
Bernard, J. 5044.
Bernard, N. 6398.
Bernardo, M.J. 2494, 2793.
Bernays, E. 8967.
Bernays, E.A. 2056, 2615, 6010, 7284, 7308.
Bernat, K.-P. 8664.
Bernheimer, A.W. 4231.
Bernini, F. 8053.
Bernini, L.F. 3314.
Berne, J.M. 2202.
Bernie, A.D. 7013.
Bernie, M.J. 4950.
Bernos, M. 4283.
Berry, E.C. 5619.
Berry, E.O. 5190, 5181, 9141.
Berry, R.E. 598, 8505.
Berry, S.J. 124, 3480, 3887, 5837.
Berry, W.J. 4482.
Berryman, A.A. 4303, 6142, 6186, 8473.
Bert, C. 3363.
Bertolani, R. 8842.
Bertrand, D. 6534.
Bertrand, M. 4454, 7803.
Berwald-Nelder, Y. 8209.
Besher, R.J. 867, 1722, 3323.
Besson-Lavignion, M.T. 1086.
Best-Belmonte, M. 8900.
Best, L.S. 5920.
Bestmann, H.J. 3729.
Besuchet, C. 4815, 8754.
Betheder-Matib, M. 2098.
Bettini, S. 3133.
Bignon, G. 153, 1926.
Beurmann, L.B. 6907.
Beuven, F. 7005.
Bewley, G.C.K. 4670.
Beyer, A.L. 7839.
Beyer, R. 441, 4571.
Beyersbergen, G.W. 5190.
Bezuidenhout, J.D. 1070.
Bezuidenhout, J.J. 9199.
Bhaduri, A.K. 7151, 9487.
Bhagat, R.C. 1641, 7213.
Bhanot, J.P. 5331, 5371, 5373, 5398.
Bhasakar, G. 1107.
Bhatia, P. 7418.
Bhatia, S.G. 3668.
Bhatia, S.K. 5043, 7692, 7742.
Bhatnagar, B.S. 1209.
Bhat, R.S. 4244.
Bhattacharya, A.K. 3087, 6913, 7468, 6583, 8102.
Bhattacharya, D.K. 7198, 7909.
Bhattacharya, T. 4442, 5249, 5259.
Bhattacharya, A. 6585, 6588.
Bi, D. 2475.
Biache, G. 2635.
Bicaba, A. 9238.
Bick, G.H. 3522.
Bick, J.C. 3522.
Bickelstoffer, R. 175.
Bickner, D. 6668.
Bicudo, H.E.M.C. 8633.
Bicudo, H.E.M.C. 3059.
Bider, J.R. 9212.
Biehl, E.R. 193.
Bielawski, R. 785.
Bielawski, J.C. 2499.
Bienz, M. 2303.
Biere, J.M. 1918.
Bierl-Leonhardt, B.A. 1383, 7788, 5703.
Bierly, T.L. 7677.
Bierzychudek, P. 5920.
Biesmann, H. 1493, 3270.
Biever, K.D. 3811.
Biezunski, N. 2338.
Bigger, M. 1260.
Biggs, D.R. 540.
Biggs, H. 2169.
Bigler, F. 7607, 7798, 9310.
Biggell, D.E. 4992.
Biggell, G.N. 9000.
Bikunova, A.N. 9013.
Billie, I. 1829.
Billen, J. 3505.
Billings, R.F. 2194.
Bily, S. 6378, 8748, 8760.
Binder, R.K. 4414.
Binkovsk, V.P. 1866, 7570.
Biney, F.P. 2849.
Bingham, P.M. 1505, 1509, 7836.
Binghai, Y. 9410.
Binnington, K. 989.
Binnington, K.C. 1800, 2917.
Binns, T.J. 3115, 5354.
Bincliffe, B. 4633.
Bintard, V.K. 9049.
Bird, M.C. 1788, 2187, 2228.
Bird, J. 71.
Birkenbeil, H. 5674.
Birker-Smith, S.J. 4752.
Birley, A.J. 2298, 2343.
Birr, C. 3074.
Bisabri-Ershadi, B. 4626.
Bishop, C.J. 3774.
Bishop, D.H.L. 7386.
Bishti, R.S. 7022.
Bistrom, O. 4781, 7163, 7895, 8043.
Bistrom, O. 1615, 2396, 4816.
Biswas, B.R. 8280.
Biswas, D.N. 4809.
Biswas, A. 6192.
Bischof, C. 6656.
Bischof, J. 1076, 3386, 6656.
Bitter, A. 3841.
Bitterman, M.E. 5874.
Bitzer, R.J. 6993, 9361.
Bjork, C.J. 947.
Biyasheva, Z.M. 2320.
Bjorksten, F. 4485.
Bjorn, L.O. 7558.
Bjorveth, G. 5285.
Black, K.R. 918.
Blackburn, N.K. 9228.
Blackburn, N.K. 3774.
Blackwell, M. 2626.
Blaetgen, G. 5863.
Blagburn, B.L. 2909, 7641.
Blahutik, A. 9010, 9049, 9095.
Blair, B.W. 3354, 9179.
Blais, J.R. 1447, 3036.
Blake, D.F. 4358, 8544.
Blackley, N. 1956.
Blanchard, A. 2510, 5603, 5604, 7230, 7992.
Blanchaert, J.-P. 6001.
Bland, R.G. 3289, 8072.
Blangburn, J.M. 5664.
Blank, D.L. 5928.
Blank, R.H. 308, 2254, 3827, 9303.
Blank, R. 7064.
Blankmeyer, J.T. 2544.
Blaser, S. 6917.
Blazsak, C. 4.
Blechl, J. 204.
Bledsoe, B. 7637.
Bledsoe, M.E. 7637.
Blest, A.D. 4343, 4717, 5668.
Blum, E. 1718, 8185.
Blum, K.A. 5082, 7537, 9055.
Blumquist, G.J. 107, 108, 229, 919, 5655, 6564, 8095.
Blondau, J. 6683.
Blondeau, J. 888, 894.
Blond, P.R.B. 695.
Blom, M.G. 6309, 7248, 9444.
Blum, M. 5009.
Blum, M.S. 259, 390, 1162.
Blum, P. 2608, 4313, 6734.
Blum, P. 7288.
Blumberg, D. 5175, 7505.

- Blust, W.E. 1460.
Boar, C.D.H. 3415.
Boatright, R.E. 3796.
Bocchino, F.J. 2820.
Boch, J. 2184.
Boch, R. 8090, 8302.
Boccharova-Messner, O.M. 8902.
Bock, J.R. 3590, 8705.
Bock, M.E. 882.
Bock, S.C. 5083.
Bodot, I.Z. 1082, 2676, 3411.
Bode, W. 7312.
Bodega, J. 6501.
Bodnaryk, R.P. 389, 960, 3282, 5682.
Boerma, A. 3530.
Boerger, H. 752.
Bogaert, A.M. 3314.
Bogdanov, Y.A. 6867.
Bogdanova, E.N. 8962, 8965.
Bogenschuett, H. 1392.
Boggs, C.L. 468, 773.
Bogus, M. 3500.
Bohart, G.E. 7524.
Bohart, R.M. 2374, 7112, 8821, 8827.
Bohmalfalk, G.T. 3962.
Bohn, B. 4147.
Bohn, H. 4147.
Bohner, J. 4129.
Boiron, J.N. 424.
Boisvert, J.-M. 2043.
Boiteau, G. 7440.
Boiteux, P. 4546.
Boivin, G. 8098.
Bokheim, F.M. 6469.
Bokken, T.D. 2576.
Bokdi, P.E. 1979.
Bolen, E.G. 2381, 3171.
Bolin, R.A. 634, 3655.
Boll, R. 6466.
Bolland, H. 3086.
Bolle, R. 1381.
Bollmann, W.E. 3343, 5002, 5826.
Boller, E.F. 7252.
Bolly, C. 5984.
Bolotin, E.I. 9189.
Boltas, G. 2013.
Bolten, A.B. 375, 452, 1878, 4300, 8553.
Bolton, B. 1651, 1652.
Bolz, J. 151.
Boman, A. 2641.
Boman, H.G. 203, 1818, 2641, 8952.
Bonaccorsi, S. 2317.
Bonadonna, P. 1612, 4808, 8747.
Bonafante, P. 1883.
Bonavita-Cougoudran, A. 2271.
Bond, E.J. 1061, 6627.
Bondareva, N.I. 9436, 9438, 9439.
Bonilla, L.L. 3802.
Bonner, J.J. 759, 6274, 8959.
Bonstedt, S. 4431.
Boobley, L.R. 755.
Booi, C.J.H. 3633, 5487, 7204, 8266.
Booker, R. 427.
Boomsma, J.J. 4455, 6981.
Boorman, J. 3413.
Boomsma, E.G. 9015.
Boote, K.J. 2003.
Booth, R.H. 5386.
Boozaya-Angoon, D. 2835, 4638, 8460.
Boppre, M. 3987, 5962.
Borden, J.H. 515, 1776, 2753, 3352, 5162, 5311, 5704, 8573.
Bordeau, C. 4161.
Bordia, A. 9256.
Bordier, J. 9340.
Bordy, B. 8893.
Boreham, P.F.L. 2110, 2911.
Borg, A. 1394.
Borgia, G. 410, 6857.
Borja, G.S. 9253.
Bork, G.E.M. 5086, 5351, 5353.
Borkin, S.G. 7380.
Borkin, S.S. 7566.
Borkovec, A.B. 1066, 2582, 5351, 5786.
Bosman, J.N. 7413, 7749.
Borneck, R. 9330.
Borovic, D. 8884.
Borovic, L. 8884.
Borsellino, A. 183.
Borst, P. 8627.
Bos, M. 3530.
Bosh, M.V. 9133.
Bostanian, N.J. 294, 680, 793.
Boswell, T.E. 1233.
Botas, J. 5445.
Botcharova, N.I. 3347.
Botelho, P.S.M. 6098.
Botter, K. 503.
Boutare, S. 1312.
Boucek, Z. 7216.
Bouchalova, J. 6686.
Boucher, J.F. 8859.
Boucias, D.G. 1826, 4208, 5736, 5747.
Boudreaux, H.B. 1592.
Boulard, M. 5584, 5645, 7074.
Bouletreau-Merle, J. 7057.
Boulin, C. 135.
Bounias, M. 164, 771, 5325, 8110, 8936.
Bourassa, J.-P. 345, 1203.
Bourdoune, J.-C. 7075, 9456.
Bourgeois, C.E. 2833.
Bourgeois, G. 2224.
Bourges, H. 3767.
Bourgin-Rosenberg, M. 3879.
Bourgoin, C. 3187.
Bourne, A.S. 5205.
Bouse, L.F. 1448.
Bouseman, J.K. 5527, 5528, 5535, 6327, 6328, 9493, 9494, 9495, 9497.
Boussieugue, J. 440.
Boussey, I.A. 6814.
Bouton, A.H. 7839.
Bouton, C.E. 1225.
Boutwell, J.L. 4536.
Bovey, P. 9421.
Bowden, E. 7530.
Bowdian, E.S. 3353.
Brack, P. 3011.
Bowen, G.S. 637, 3655.
Bowen, P.M. 4518.
Bowerman, R.F. 113, 119, 120, 902.
Bowers, M.A. 2005.
Bowers, W.S. 3337, 3342, 6586, 8442, 8963.
Bowler, K. 169.
Bowler, C.R. 1045, 1127.
Bowling, J.W. 7813.
Bowling, M. 3912.
Bowman, C.E. 1764, 2816.
Bowen, A.W. 8501.
Bowman, M. 3469, 3901, 6243.
Boyan, G.S. 129, 4960.
Boyce, W.L. 4515.
Boyd, J.B. 3097, 3902, 5444, 7030.
Boyd, S.F. 5444.
Boyes, D. 5359.
Bozouk, A.N. 1755, 5057.
Bozeman, F. 1322.
Bozicic, B. 3939.
Bozimo, H.T. 213.
Braasch, D. 4006.
Brac, T. 6557.
Bracher, G.A. 9212.
Brack, A. 5719.
Bracken, G.K. 8079.
Brader, L. 7724.
Bradfield, J.Y. 1V. 351.
Bradisch, G.A. 7360.
Bradley, J.D. 842, 2465, 4041, 4897.
Bradley, T. 984.
Bradley, R. 3878.
Bradley, T.J. 162, 8101.
Bradoo, B.L. 6672.
Bradshaw, J.W.S. 8973.
Bradshaw, W.E. 348.
Brady, A. 1180.
Brady, E.J. 1735.
Brady, J. 5772.
Brady, J.R. 6090.
Brady, U.E. 198, 214, 1881, 8097, 8255, 8484.
Braekman, J.C. 255, 3348.
Braeunig, P. 910, 8067, 8905.
Braga, M.A.S. 4922.
Brakenhoff, G.J. 7849, 8627.
Brancucci, M. 6370, 7941, 7943.
Brand, J.M. 2608.
Brand, S. 2931.
Brandao, D. 8289.
Brandenburg, R.L. 8400.
Brandl, D.G. 8278.
Brandmayr, P. 4446.
Brandmayr, T.Z. 4446.
Brant, E. 2798.
Branson, T.F. 691, 4413, 6117, 6915.
Brantley, N.B.M. 5866.
Brar, K.S. 5363, 7520, 7792.
Brasch, K. 1775.
Bratstad, 863.
Brattsten, L.B. 5623.
Brautner, G. 3306.
Braverman, Y. 1997, 3413, 3690, 7628, 8797, 9480.
Brawn, O.L. 6906, 8580.
Braz, A.J.B.P. 6034.
Breckenridge, L. 2718.
Brenan, F. 8670.
Breed, M.D. 8506.
Brenner, R.J. 991.
Breer, H. 4964.
Bregliano, J.C. 2326.
Brehlin, M. 2542.
Breniere, J. 686.
Brennan, J.M. 4764.
Brennan, M.D. 3506.
Brenner, R.J. 2494, 2793, 3400.
Brenner, R.R. 191, 192.
Brenner, S. 3659.
Bretherton, R.F. 4470, 9449.
Breuning, S. 3182, 7938, 9939.
Breuzet, M. 3521.
Brewer, B.B. 1705.
Brewer, B.S. 3792.
Brewer, D.F. 1750, 3243.
Brewer, F.W. 9134.
Brewer, G.J. 6742.
Brewer, J.W. 1446, 3424, 3778, 6713.
Breznak, J.A. 3574.
Brian, M.V. 2273, 2279, 3049.
Briand, J. 8900.
Briceno, A. 2777.
Bridges, A.C. 5693.
Bridges, C.R. 5671.
Bridges, J.R. 383, 1214, 5700.
Bridges, R.G. 4076.
Bries, T. 2721, 3367.
Briese, D.T. 6239, 7370.
Briggs, S.P. 490.
Brigham, W.U. 4788.
Bright, D.E. 806, 2397, 7167.
Brightwell, R. 5616.
Brinck, P. 1563.
Brindle, A. 5563.
Brindley, T.A. 6099, 6100, 8851, 9306.
Brindley, W.A. 1841, 7420, 8015.
Brines, M.L. 7507.
Brink, N.G. 368.
Briolini, G. 2815, 2829, 6772, 6773.
Briscoe, D.A. 2487.
Brits, J.A. 1796, 7526, 9033.
Britt, N.W. 3052.
Brittain, J.E. 6233.
Britton, T. 1740.
Britton, D.K. 3698.
Britten, R.J. 1557.
Brittmacher, J.G. 3125.
Britton, L. 3165.
Brncic, D. 1578.
Broadhead, E. 4063.
Broadie, E.B. 6862.
Broce, A.B. 221, 8560.
Brock, A.M. 3039.
Brock, H.W. 2564, 3917.
Brockmann, H.J. 6836.
Broda, H. 3096.
Brodie, D.A. 8937.
Brodie, E.D. Jr. 5155.
Brodie, E.D. Jr. 3863.
Brodsky, A.K. 6522.
Broerse, J.J. 2312.
Broglia, N. 8417.
Bronner, F. 8081.
Bronx, R. 1236.
Brooke, R.K. 6848.
Brookes, H.M. 827.
Brookhart, J.O. 1595.
Brooks, G.D. 6287.
Brooks, G.T. 1072.
Brooks, M.A. 4135.
Brooks, R.H. 2935.
Brooks, R.W. 1213.
Brophy, J.J. 246, 4995.
Brossut, R. 4310.
Brothers, D.J. 5178, 9132.
Brou, V.A. 7228.
Brousseau, P. 966, 1116, 1118, 1146, 4980, 5079, 7489.
Brovk, L.Yu. 8934.
Brower, D.L. 339, 1080, 7429.
Brower, J.H. 3905, 8232.
Brower, L.P. 5958, 9154.
Brown, C. 180.
Brown, C.S. 2168.
Brown, C. 120.
Brown, D.A. 2617, 2619, 9000.
Brown, D.W. 6148.
Brown, F.M. 3168.
Brown, G. 8564.
Brown, G.M. 3325.
Brown, H.E. 678, 8560.
Brown, H.P. 3167, 4773, 4784, 5507.
Brown, J.J. 8236.
Brown, K.S. Jr. 5233.
Brown, M.A. 1040.
Brown, M.B. 3272, 4948.
Brown, M.R. 8236.
Brown, M.W. 2821.
Brown, T.J. 7993.
Brown, S.J. 1232, 6883, 8428, 9068.
Brown, T.C. 3902.
Brown, T.M. 3445, 4226, 8201.
Brown, W.L. Jr. 6430.
Brown, W.V. 1785.
Brown, D. 1035.
Brown, J.E. 812.
Brown, L.E. 2007.
Brown, R.W. 5403.
Browning, H. 8558.
Browning, H.W. 5731.
Browning, T.O. 2679.
Bruma, M. 2643.
Brum, O. 4796.
Bruckler, R.M. 148.
Bruecker, G. 664.
Brugh, T.H. 366.
Brum-Zorrilla, N. 1514.
Brun, L.O. 4558.
Bruneau, A.H. 537.
Brunet, P.C. 171.
Brunetti, R. 6917.
Brumhes, J. 6467.
Brunnarius, J. 917.
Brunner, J. 9029.
Brunner, J.F. 3008.
Brussard, P.F. 1293.
Brust, R.A. 3570.
Brusven, M.A. 6236.
Brutad, D.L. 5680.
Bry, R.E. 3796.
Bryan, J.H. 3658.
Bryan, H. 2747, 9423.
Bryant, P.J. 341, 767, 1106.
Bryant, S.H. 3127, 6279, 6814.
Bryson, K. 4226, 8201.
Buchan, P.B. 321, 429.
Buchanan, G.A. 2997.
Buchan, L.P. 8992.
Buchelos, C.H. 7663.
Buchheim, C. 1352, 4501.
Buchi, R. 2657.
Buchmann, S.L. 558, 5537.
Buchner, E. 8013.
Buchs, C. 334.
Buchingham, G.R. 1969.
Buckle, G.R. 2268, 3359, 6216, 7003.
Buckley, D.S. 5470.
Budnik, M. 1578.
Buecher, R. 1375.
Buechi, C. 1120.
Buechi, R. 6917.
Buechner-Vollmers, A. 7829.
Buei, K. 1348.
Buelthoff, H. 906.
Bueno, O.C. 8892.
Buerger, G. 7703.
Bues, R. 1861.
Buescher, G. 256, 257, 9007.
Buescher, P. 238.
Bugaisky, G.E. 8932.
Bugayev, G.S. 589.
Bugbee, R.E. 4878, 8825.
Bugg, C.E. 8174.
Buhl, O. 5515.
Bull, A.L. 5068.
Bull, C.M. 1922, 5218, 5939, 7332.
Bull, G.D. 7445.
Bull, G.J. 1550.
Bulla, L.A. Jr. 3426, 4186, 4505.
Buller, R. 1206.
Bulliere, F. 100.
Bullington, S.W. 2421.
Bullini, L. 4937.
Bullock, I.D. 6827.
Bullock, R.C. 3747.
Bulmer, M.C. 3043, 3050.
Bulman, T.L. 9180.
Bunting, S. 3091.
Burali, G.M. 9172.
Burand, J.P. 3414, 5757.
Burbitts, P.P. 2033.
Burdette, A.W. 3456.
Buren, W.F. 4433, 4642.
Burgerdorfer, W. 1332.
Burger, J.F. 28, 1131, 2903, 5974.
Burger, W.C. 5200.
Burgerer, A. 6235.
Burgess, H.D. 1811, 3394, 3708, 4623, 5300, 5733, 8120, 8532.
Burgess, L. 1974, 4335, 5531, 8368, 8482.
Burgess, M. 298.
Burgis, H. 6510.
Burgos, C.F. 8520.
Burk, K.B. 9396.
Burk, T. 4698, 4924.
Burke, D.S. 1820.
Burke, H.R. 1597.
Burke, J. 4196.
Burke, J.F. 6246.
Burkhardt, E. 3378.
Burkholder, W.E. 220, 1779, 1931, 6700, 8115.
Burkot, T.R. 3662, 8305.
Burmahn, K. 7068.
Burn, A.J. 2674, 8385.
Burnet, B. 3536.
Burnett, P.A. 2178.
Burns, D.K. 8935.
Burns, J.M. 7994.
Burrill, R.M. 4452.
Burkhart, H.E. 683.
Burrows, M. 5665, 8065.
Burrows, T.M. 8558.
Bursay, C. 1092.
Burt, R. 4962.
Burton, G.W. 1252.
Burton, J.F. 6301, 6305.
Burton, J.J.S. 5683.
Burton, R.L. 2191, 3737, 3822, 4402.
Burts, E.C. 3008, 8498.
Buruga, J. 7061.
Burrill, K. 4952.
Buscarlet, A. 2545.
Buschinger, A. 2285.
Buschman, L.L. 1176, 1273, 3035.
Buskirk, R.E. 5913.
Buskirk, A.C. 6834.
Busse, F.K. Jr. 7296.
Busse, M. 8469.
Busiens, A. 4599, 8425.
Busser, D. 2334.
Butcher, C.F. 247.
Butcher, M.R. 6688.
Butler, J.F. 1780.
Butler, G.D. Jr. 2695, 4604.
Butler, J.F. 1780.
Butler, J. 5789.
Butler, L.J. 216.
Butler, M.G. 5149.
Butler, W.F. 3581.
Butlin, R.K. 6278.
Butt, S.A. 521, 5703.
Butt, S. 9161.
Butt, S.M. 1284, 6854, 9183.
Butter, N.S. 7701.
Butterfield, J. 3559.
Butts, R.A. 8479.
Buxton, B.A. 8432.
Byers, C.M. 334.
Byers, G.W. 3152, 6450.
Byers, J.A. 1784, 1929, 3352, 3539.
Byers, J.R. 7996, 7998.
Byers, R.A. 605, 6901, 6902.
Bynum, E.D. Jr. 1473, 8510.
Byrd, R.V. 6489.
Cabello, L. 2051.
Cabre, O. 8196.
Cabrer, J. 3092.
Caccone, A. 7863.
Cade, W.H. 7499.
Cadogan, B.L. 1328.
Cady, A.B. 1936.
Caetano, H. 5066.
Cagniat, H. 7002.
Cahn, D. 4859.
Cai, Q.-J. 4580.
Cai, Z. 5289.
Cailla, H.L. 2571.
Cajina-Quezada, M. 188.
Calabrese, D.M. 6282, 8637.
Calderon, S.A. 1925.
Caldere, M. 1089.
Caldwell, N.J. 4518.
Caligari, P.D. 2689.
Caligari, P.D.S. 2341.
Calisher, C.H. 637, 3655.
Callan, J. 1594.
Callarico, J. 8402.
Calloni, C. 6592.
Callow, N.A. 7249, 7615.
Caltabiano, A.M. 4324, 5154.
Calugar, M. 3.
Calvayrac, R. 8900.
Calvert, P.H. 3834.
Camacho, J.P.M. 1567, 3092.
Camacho, C.A. 5022.
Camargo, E.P. 5032.
Caminzine, S. 2612.
Cambofort, Y. 1185.
Cambridge, J. 8622.
Cameron, C.R. 3674.
Cameron, D.W. 4154, 4107.
Cameron, E.A. 373, 2821, 5872.
Cameron, J. 4489.
Cameron, P.J. 506, 4382.
Cameron, S.A. 1925.
Camhi, J.D. 2529, 2752.
Camin, J.H. 5276.
Cammaerts, M.-C. 4348, 6576.
Cammaerts, M.C. 973, 2267, 5169, 5867.
Cammaerts, R. 4348, 5169.
Cammell, M.A. 2969, 3800.
Campadelli, G. 2822, 2827, 6565, 6766.
Campbell, B.C. 3578, 6096.
Campbell, C.A. 3492.
Campbell, C.J. 717, 3815.
Campbell, D.R. 2065.
Campbell, I.C. 3952.
Campbell, J.B. 2148, 6779, 7606.
Campbell, J.M. 6380, 7935.
Campbell, R.W. 1972, 4542, 5996, 6026, 6078.
Campbell, W.V. 3794, 5416.

- Campion, D.G. 8490.
Camposasso, G. 1979.
Campos-Ortega, J.A. 8648.
Campos, M. 7021.
Campos, R. 9285.
Campos, T.B. 6192.
Camras, S. 6392.
Canada, A.T. 9235.
Canad, M. 1686, 4301.
Cancela da Fonseca, J.P. 6837.
Candelas, G.C. 186.
Candy, D.J. 4955.
Cane, J.H. 244, 5101.
Cangialosi, C.P. 668.
Canning, E.U. 8125.
Cannings, R.A. 5526.
Cannings, R.A. 6495.
Cannings, G.C. 978.
Cannon, K.F. 2000, 3527, 8014.
Cannon, W.N., Jr. 8234.
Carraro, W.W. 1431, 4598, 6172, 8448.
Canton, S. 3165.
Cantrell, B.K. 2504, 4927.
Cantrell, M.A. 6832.
Canwell, E.G. 1431, 4598, 4900, 8448, 8456.
Canzonero, S. 3997.
Cao, G.-J. 2727, 3872.
Capdevila, M.P. 8642.
Capehart, J.S. 2116.
Capella, P. 3390.
Caperna, J.L. 234, 1859, 1994, 3778, 6863, 7781.
Capotosto, P. 5359.
Capriles, J.M. 1634, 4848, 4858, 5579.
Carante, P.J. 1532.
Carauta, J.P.P. 4403.
Caraton, J. 985.
Cardé, R.T. 415, 416, 854, 3753, 4312.
Cardona, C. 2246, 4592, 4609, 8459, 8578, 9347.
Cardona, E. 2261.
Cardo, D. 3396.
Carlberg, U. 5805, 5810, 6494, 6633, 6654, 6733, 7054.
Carle, F.J. 3229, 8001.
Carley, J.G. 7632.
Carlier, Y. 4668, 4692.
Carlson, A.D. 265, 5848.
Carlson, D. 882.
Carlson, D.A. 213, 697, 1780, 6084, 8254.
Carlson, D.B. 6045.
Carlson, A.D. 994.
Carlson, J.B. 4448.
Carlyle, C.Jr. 382.
Carlyle, T.C. 3257.
Carne, P.B. 2673.
Carnier, G.R. 716.
Caron, D.M. 1408, 2212, 3760.
Carpenter, A.T.C. 9384.
Carpenter, F.M. 2376.
Carpenter, J. 6983.
Carpenter, J.E. 1943, 3540, 4291, 4610, 8253, 9298.
Carpenter, J.M. 1033, 4873, 5727.
Carpenter, S.R. 1455, 4478, 6818, 9377.
Carria, A. 1777.
Carre, S. 4375.
Carreira, L.M.M. 4410.
Carrera, J. 6534.
Carrero, J.M. 1458.
Carrere, B. 7713.
Carrillo, J.R. 6927.
Carrillo, R. 548.
Carroll, C.R. 6284.
Carroll, J.F. 3444.
Carroll, S.C. 6644.
Carrow, G.M. 4266.
Carrow, J.R. 5302.
Carvalho, H. 3502, 6294.
Carver, B.Jr. 1423.
Carver, D.J. 4897, 4919.
Carver, F.L. 1810, 3808.
Carver, J.H. 1437.
Carver, N. 2891, 4393, 8394.
Carver, R. 4483.
Cartie, V.M. 5166.
Carton, Y. 6637.
Cartwright, B. 1695.
Cartwright, B.A. 5113.
Cartwright, O.L. 7625.
Cartwright, O.L. 1607.
Carvalho, J.C.M. 4753, 4848, 4849, 4850, 4851, 4852, 4854, 4858.
Carvalho, J.F. 6568.
Carver, M. 39, 7349.
Casady, A.J. 4638, 8460.
Casagrande, R.A. 4407, 6152, 8548.
Casale, A. 4814.
Case, R.L. 3654.
Casale, A. 808.
Casey, M.A. 5124.
Casey, T.M. 118, 891, 6524.
Casida, J.E. 316, 1040, 1839, 5775, 6559.
Casper, E.A. 1006, 1332.
Caspers, N. 3865.
Casiani, G. 4166.
Cassidy, D.V. 9316.
Cassier, P. 205, 4120.
Cassola, F. 2373.
Castano, S.C. 7055.
Castel, F.A. 3139.
Castellanos Ruiz, E. 8334.
Castellari, P.L. 2813, 4166, 6847.
Castellini, G. 1605.
Castellon, E.G. 4305, 4643, 5222.
Casti, J. 6904.
Castillo Hernandez, J.A. 8029, 8030.
Castleton, C.W. 8437.
Castro, C. 1375.
Castro, D. 8863.
Castroville, P.J. 3130.
Caswell, W. 7262.
Catalano, E.A. 4625, 9272.
Cate, J.R. 6115.
Cates, A.H. 4621.
Cattell, K.J. 899.
Catts, E.P. 5912.
Caulton, J.H. 1079.
Causanel, C. 479, 3521.
Cavallini, M. 2671.
Cavalloro, R. 95.
Cavener, D.R. 1525, 3129, 4687.
Caveney, S. 134.
Cavicchi, S. 1508, 3503, 5451.
Cavill, G.W.K. 246, 4995.
Cedergren, R.J. 8092.
Cederholm, I. 7274.
Celentano, J. 3914.
Center, T.D. 692, 2204.
Centurion, C. 2184.
Centurion, V.C. 6881.
Cepelak, J. 1349, 2356.
Cesquira, J.L. 291.
Cervo, R. 5150.
Cesaroni, D. 7863.
Chadd, E.M. 5772.
Chadov, B.F. 9402.
Chadova, E.V. 9402.
Chadon, A.D. 265, 5848.
Chadwick, D.P. 1322.
Chadwick, J. 3165.
Chadwick, J.S. 1071, 8134.
Chaffee, D.L. 2292.
Chahal, B.S. 5330.
Chahal, N.S. 7759.
Chaka, S.Y. 2532.
Chain, B.M. 5720.
Chakrabarti, D.K. 6346, 6349.
Chakrabarti, K.B. 2994, 2995, 2999.
Chakrabarti, S. 3969, 7137, 7138, 7198, 7909, 8714.
Chakraborty, D.P. 863.
Chakraborty, N. 2128, 7383.
Chakravorty, S. 7425, 7674, 8898.
Chalfant, R.B. 1456, 2081, 2235, 4581, 4614, 8522, 8529, 8540, 8551.
Challier, A. 1342, 4074, 9240.
Chalmers-Hunt, J.M. 6306, 9449.
Chamberlain, D.J. 5821, 6269.
Chambers, D.L. 7252.
Chambers, D.M. 2920.
Chambers, G.K. 1551, 3910, 4491, 6283.
Chambers, G.P. 2935.
Chambers, H.W. 8188.
Chambers, M.D. 5397.
Chambers, R.J. 8389, 9208.
Chambers, R.R. 2214.
Champagne, D. 8970.
Champie, C. 1406, 2968.
Chan, B.G. 483, 2083, 4414.
Chan, C.K. 5524.
Chance, M.M. 4353.
Chand, P. 7561, 7702, 7734.
Chand, S.P. 356.
Chander Bhagat, R. 7110.
Chandler, L.D. 2084, 2186, 2189, 2195, 4660, 9155.
Chandler, P.J. 4005, 5510, 7889.
Chandra, S. 6913, 9123.
Chandrasekhar, S. 3409.
Chanellet, J. 3280.
Chang, C.K. 176, 5787.
Chang, E.S. 5811, 8060.
Chang, F. 8094, 8099, 8109, 8956.
Chang, H. 8020.
Chang, L.H. 529.
Chang, M.H. 1735.
Chang, M.S. 4502.
Chaniotis, B.N. 1831.
Channabasavanna, G.P. 1396, 5377.
Chant, D.A. 1205, 1206, 1870, 4350, 4356, 4466, 4468, 8723.
Chanter, D.O. 3027, 7056.
Chao, C.-M. 3996.
Chao, E.S.M. 7113.
Chao, W. 4243.
Chapel, J. 1330.
Chapel, T.D. 1330.
Chapin, J.B. 1429.
Chaplin, S.B. 2783, 6844.
Chaplin, S.J. 2783.
Chapman, M.G. 5977.
Chapman, R.F. 2056, 2615.
Chapman, R.K. 8239, 8571.
Chararas, C. 941, 4156, 4344.
Chari, M.S. 7675.
Charles, J.F. 2637, 3423.
Charles, J.G. 459.
Charles, P.J. 8450.
Charlesworth, W.A.G. 1231.
Charlesworth, B. 3117, 3120.
Charlet, L.D. 6091, 6932, 9309.
Charlton, R.E. 415, 4312.
Charlwood, J.D. 1132, 4354, 4426, 4493.
Charnley, A.K. 2012.
Charpentier, M. 6608.
Chareau, E. 3322.
Chassagnard, M.T. 1626.
Chastain, B. 179.
Chastel, C. 4188.
Chaudhary, A. 1065, 2851, 5207.
Chatterjee, A.K. 4000.
Chatterji, S.M. 2851.
Chatopadhyay, A.K. 2808, 4365.
Chatopadhyay, D. 7846.
Chaudhuri, S. 8439.
Chaudhuri, J.P. 1324.
Chaudhury, R.G. 3042.
Chaudhury, R.N. 5135.
Chaudry, A.B. 5399.
Chaudry, H.S. 7447.
Chaudry, S. 1518.
Chaudhuri, P.K. 4000, 4827.
Chaudhry, M.F.B. 388, 1334, 2698, 3355, 5093.
Chauxaux, J. 2635.
Chauthani, A.R. 4078.
Chauvin, G. 2499, 3286.
Chavain, R. 1947, 3350.
Chavnanpong, M. 4568.
Chazeau, J. 2774, 4576.
Cheary, B.S. 4775.
Chebster, L.D. 9314.
Cherfura, W. 945, 950, 953.
Chelievski, S. 9288.
Chelliah, S. 306, 307, 6122.
Chen, J.A. 6385.
Chen, D.-B. 1778.
Chen, D.-B. 2423.
Chen, J.-M. 43.
Chen, K.-T. 475, 2704.
Chen, L.-D. 2781.
Chen, L.-D. 4646.
Chen, M.-L. 4590.
Chen, M.-Q. 3397.
Chen, P.S. 2728, 8118.
Chen, R.-G. 8986.
Chen, R.-S. 3239.
Chen, R.C. 562.
Chen, S.-L. 4580.
Chen, T.T. 190.
Chen, W.-H. 9224.
Chen, W.-Z. 9225.
Chen, X.J. 2174.
Chen, Y.-L. 4450.
Chen, Z.-Y. 3397.
Chen, Z.H. 193.
Chenevert, R. 1049.
Cheney, J. 9266.
Cheng-Lai, F. 969.
Cheng, L. 936.
Cheng, L.-D. 8307.
Chen, N.N. 562.
Cheng, Z.-Q. 1778.
Cheong, W.H. 5683, 5691, 6057, 7872.
Cherbas, L. 3336.
Cherbas, P. 3336.
Chernousov, A. N. 9047.
Cherrett, J.M. 2981.
Cherry, R. 2946.
Cherry, R.H. 1298.
Chesson, J. 5940.
Cheung, P.Y.K. 5028, 5684, 5750.
Cheung, W.W.K. 163.
Chevalant, C. 8666.
Chevalier, C. 8620.
Chevallier, A. 8084.
Chew, F.S. 1286, 2048.
Chhabra, K.S. 5730.
Chhabra, S.C. 6804, 7910, 7912.
Chhibber, R.C. 1462.
Chhotani, O.B. 5426.
Chi, C. 882.
Chia, L.S. 9051.
Chialiang, C. 5792.
Chiang, H.L. 5683, 5691, 7872.
Chiang, H.C. 3489.
Chiang, W.-L. 1384.
Chiarelli-Alvisi, G. 8938.
Chiavogato, L.G. 6200.
Chihara, C.J. 3911.
Chikunov, V.I. 781.
Childers, C.C. 4541, 4613, 5188, 8204, 8565.
Childress, D. 3080.
Childs, C.N. 5685.
Childs, M. 1764.
Chintawati, M. 235, 2631.
Chinn, H.R. 1783.
Chinnici, J.P. 4212, 5803.
Chino, H. 94, 2555, 6563, 7307.
Chinzei, Y. 6569.
Chippendale, G.M. 207, 2566, 3476, 4256, 5076, 6831, 8446.
Chiri, A.A. 5944.
Chisholm, I.F. 4363.
Chisholm, M.D. 223, 3583, 5702, 7235.
Chi, S.-F. 1013.
Chizzonite, J.J. 674, 6128, 8415.
Chmurnyński, A. 7500.
Chmurnyński, J.A. 2787, 5127.
Chomyn, A. 5686.
Chong, L. 1778, 5704, 8573.
Choochoe, W. 4691, 7259.
Chooi, W.Y. 8935, 9385.
Chopra, N.P. 7193, 7194, 7275, 7911, 8671.
Choudhury, L.B. 7704.
Choudhuri, D.K. 2808, 4363, 5253.
Chovnick, A. 7854.
Chow, Y.S. 5007.
Chquilloff, M.A. 631.
Christ, I. 6541.
Christensen, B.M. 1031.
Christensen, H.A. 653, 667.
Christensen, N.D. 4984.
Christensen, P. 265.
Christiansen, F.B. 2319.
Christmas, P.E. 6912.
Christodoulou, C. 933, 2979.
Christoph, N. 7295.
Chrominski, A. 4264.
Chu, A.J. 6564.
Chu, C.-M. 7420.
Chu, F.-I. 1575.
Chu, J.C.L. 2174.
Chubareva, L.A. 2940, 9405.
Chudakova, I. 5820.
Chujo, M. 1610, 8773.
Chung, K.L. 8134.
Collins, A.M. 375, 417, 492, 8300, 8594.
Collins, H.L. 2192, 2193.
Collins, M.D. 2887.
Collins, M.M. 7864.
Collins, M.S. 253, 1566.
Collins, P.M. 6278.
Collins, R.C. 659.
Collins, W.E. 635, 639, 8432.
Collison, C.H. 373, 1452, 8572.
Collobb, J. 8882.
Colombo De Correa, M.V. 1655.
Coman, B.J. 511.
Coman, R.L. 2334.
Combs, R.L.Jr. 556.
Comellini, A. 8780.
Compton, S. 5156.
Compton, S.G. 5592.
Conaway, R.C. 8626, 9066.
Conconi, M. 9086.
Conde, B. 4822, 4824.
Condon, C. 9086.
Cone, R. 942.
Confalonieri, U.E.C. 6334.
Conley, H.L. 6097.
Conley, M.R. 5924.
Connell, T.D. 3869, 6861.
Connell, W.A. 3764.
Conroy, J.D. 7140.
Consigli, R.A. 3426, 4505.
Conte, A. 4315.
Conte, L.S. 3390.
Contel, E.P. 7527.
Conti, J.A. 3582.
Cook, B.J. 965, 3283, 4125.
Cook, E.F. 1250, 7926, 8056.
Cook, L.M. 5500.
Cook, R. 908, 1140.

- Cook, R.W. 650.
Cook, V.A. 7705.
Cooley, S.S. 3353.
Coombe, P.E. 8265.
Cooney, J.C. 2935.
Cooper, C.R. 4750.
Cooper, D.A. 1280.
Cooper, D.J. 1029.
Cooper, P.D. 8104.
Cooper, S.D. 8616.
Cooper, R.J. 5878.
Copeland, J. 5848, 9018.
Copenhaver, C. 6787.
Copenhaver, P.F. 967, 7431.
Coppedge, J.R. 678, 8497, 8560.
Coppel, H.C. 2741, 2754, 3538, 5722.
Corbet, P.S. 3524, 5385, 6673.
Corbet, A.A. 4384.
Corbiere-Tichane, G. 4979.
Corcoran, S.M. 2084.
Corcuera, L.J. 532.
Cordeiro, A.R. 5836.
Cordell, B. 9380.
Cordellier, R. 9230.
Cordero del Campillo, M. 7642.
Cordero Sanchez, M. 7642.
Cordo, H.A. 2053, 8379.
Cork, A. 3354, 3871.
Corkhill, R.T. 4565.
Corley, C. 2176.
Corliss, J.O. 3608.
Cornell, H.V. 2034.
Corney, J. 1419.
Corney, M.A. 7108.
Cornuet, J.-M. 8620.
Cornuet, J.M. 7924, 8058, 8666.
Corpus-Raros, L.A. 2925.
Correa Bueno, O. 7001.
Correa, M.A. 1831.
Correa, M.A. 4433.
Correa, M.A. 7108.
Corso, C.R. 1137.
Corso, I.C. 6154.
Cortopassi-Laurino, M. 9362.
Corwin, M.D. 2377.
Cossentine, J. 5313.
Cossentine, J.E. 8168.
Costa, C. 6382.
Costa, C.H.N. 1375.
Costa, G. 4324, 5154.
Costa, J.O. 5029.
Costa, M. 800.
Costa, M.T. 1137.
Costantino, R.F. 3647.
Coster, J.E. 1375.
Cotlow, N. 3877.
Cotnam, M.L. 6690.
Cotnam, M.D. 6408.
Cottas, M.P. 6158.
Cotton, B. 3281.
Coullet, H. 1112.
Couch, P.A. 2343.
Couch, T.L. 4094, 4548, 5735, 6602, 8984.
Cousey, H.M. 8261.
Coutilleu, R. 3419.
Coulson, J. 2524.
Coulson, J.C. 3559.
Coulson, R.N. 1879, 1891, 3600, 3643, 3644, 4561, 6680.
Coulter, A.R. 1366.
Coulter, D.E. 7045.
Coulter, S.J. 1872.
Couraud, F. 8175, 8209.
Courret, D. 4549, 4550, 9238, 9251.
Courgeon, A.M. 2571.
Courtney, S. 4290.
Courtney, S.P. 4290, 5954, 8348.
Courtright, J.B. 1838.
Coutant, C.R. 5435, 8606.
Coutts, J. 6319.
Coutts, J.G. 6316.
Couturier, G. 5964.
Couvillon, P.A. 5874.
Covell, C.V. 3152.
Covell, C.V. Jr. 7918.
Covell, C.V. Jr. 3154.
Coville, D.J. 1278, 1879, 1891, 6680.
Coville, R.E. 6980.
Cowan, D.P. 1913.
Cowan, R. 7991.
Cowlley, J. 8313.
Cowling, D.E. 8536.
Cox, J.A. 3335.
Cox, J.M. 1194.
Cox, M.L. 5636.
Cox, P.D. 1127, 2264.
Coyle, F.A. 6042, 6714.
Coyne, J. 6814.
Coyne, J.A. 3335.
Crabill, R.E. Jr. 3236.
Craig, D.A. 4135, 4533.
Craig, D.M. 9426.
Craig, E.A. 7834, 8629.
Craig, G.B. Jr. 1266, 4482, 7568.
Craig, G.F. 7609.
Craig, R. 3848.
Craine, B.L. 1506, 1507.
Cram, W.T. 5303.
Crane, E. 6207.
Cranham, J.E. 297, 7869, 7870.
Crankshaw, D.L. 1758, 1768.
Crankshaw, O. 1481.
Crankshaw, O.S. 409.
Crans, W. 1312.
Crans, W.J. 660, 6054.
Cranston, P.S. 818, 1370, 4828.
Crass, B. 1324.
Crawford, A.M. 880, 2650.
Crawford, L.A. 1127.
Creighton, C.S. 8494.
Creighton, S.C. 1834.
Cremona, R. 6252.
Cress, D.C. 6094.
Creus, A. 8196.
Creus, R.M.A. 1513.
Crews, R.M. 2280, 2372, 8117.
Cribb, P.W. 5630.
Cribbs, D.L. 9391.
Criss, W.J. 7114.
Criss, J.T. 1354.
Crjnar, R. 914.
Crjnar, R.M. 3353, 4136.
Crocker, R.L. 1845, 2197, 8556.
Croft, B.A. 560, 1063, 1585, 3128, 3712, 5794, 6288, 7408, 7727, 8173, 8215, 8517.
Croizier, G. 1825, 3394, 3419, 3708.
Croizier, L. 3419.
Crompton, G.W. 1311.
Cronhardt, J.E. 8282.
Cronholm, G.B. 9102.
Crook, N.E. 1468.
Croset, H. 6712.
Cross, E.A. 5188, 6048.
Cross, J.H. 1378, 2230.
Cross, J.V. 3766.
Cross, W.H. 8528.
Crosskey, R.W. 3630.
Crossley, D.A. Jr. 2111, 2144, 5989, 8108.
Crowder, L.A. 1830.
Crowe, T.M. 6848.
Crowley, P.H. 1488.
Crownson, R.A. 2394, 3135.
Crozier, R.H. 3118, 7871.
Crummett, D. 962.
Cruse, H. 115, 889, 890.
Cruz, C. 1287, 1428, 2261.
Cruz, S. 8048, 8335.
Cruz, W.J. 189.
Crystal, M.M. 226, 2252.
Csordas Toth, E. 8645.
Cubitt, J. 3858.
Cuellar, J. 9378.
Cueman, M.K. 1735.
Cuervo, N. 3970.
Cuff, W.R. 7662.
Cuffney, T.F. 5434, 7820.
Cui, W.Q. 8166, 9226.
Cui, X. 2895.
Cuissance, D. 1345.
Cukerman, R. 3680.
Cukier, M. 5237.
Culik, B. 1186.
Cullen, J.M. 9278.
Culter, B. 5547.
Culver, D.C. 2837.
Cunha, H.C. 5350.
Cunningham, G.N. 392.
Cunningham, J.C. 1026, 3828, 4589.
Cunningham, T.K. 2335.
Cuppello, J.M. 4078.
Cupp, E. 659, 2494, 2793, 3494, 9001.
Curtis, C.F. 1356.
Curnutte, B. Jr. 608.
Curran, J. 4209, 5740.
Curry, G.L. 3644, 6115.
Curry, J.P. 5234.
Curry, C.E. 2219, 5838, 5839, 8507, 9076.
Curtis, C.F. 5338, 5501, 5979, 6135, 6287, 9015, 9430.
Curtis, G.R. 389, 2075.
Curtis, R.F. 2202.
Curtiss, W.C. 3914.
Curtis, J.W. 2519, 6290.
Cutillas-Barrios, C. 8050, 8051.
Cutler, B. 7149.
Cutler, J.R. 8429.
Cwik, L.S. 871, 1579.
Cwikla, P.S. 7981.
Cyborowicz, B. 3500, 6527.
Czypch, D. 460.
Czeczuga, B. 4157.
Czylok, A. 8815.
D'Arcy, C.J. 2178.
D'Souza, S.F. 2561.
Da Cruz Landim, C. 5066, 5097, 8243, 8668.
Da Cruz-Landim, C. 5065.
Da Cunha, R.A. 8892.
Da Silva, I.P. 6044.
Da Silva, J.M. 631.
Da Terra, L.S.W. 3033.
Dabbour, A. 5762, 6017.
Dabbour, A.I. 3738.
Dabek, A.S. 8192.
Dabi, R.K. 2985, 5307.
Dabrowski, Z.T. 49, 4153.
Dachy, Y. 7073.
Dacie, J.V. 6319.
Dacie, M.K.V. 6319.
Dadd, R.H. 288, 289.
Daffner, H. 4810.
Dahlman, D.L. 1763, 4391.
Dahlsten, D.L. 2216, 4228, 4378, 7121.
Dahn, K.H. 968.
Dahn, P.A. 3740, 8521.
Dai, J.D. 426.
Daigle, J.J. 6481.
Dailey, P.J. 4181.
Dajcar, R. 9152.
Dakin, M.E. 3164.
Dakkoumi, M. 1158.
Dal, B. 5212.
Dale, D. 3034, 5084, 8975.
Dale, J.F. 4276.
Dall, J. 1581.
Dall, H. 4155.
Dalglish, R.J. 8983.
Dall'Asta, U. 840.
Dallai, R. 3287.
Daloze, D. 255, 3348.
Dalton, T. 927.
Daly, C.E. 5484.
Daly, C.F. 5023.
Dandbach, M. 4972.
Dane, D.A. 3679, 6052.
Dannan, A.J. 5233.
Dana, R.P. 8246.
Dand, T.D. 6483.
Dandawate, C.N. 3785.
Dandau, J.P. 1368.
Daneholt, B. 3873.
Daneil, K. 3857.
Daneil, E. 3320.
Daniellson, R. 8356.
Danilov, V.N. 6404, 9220, 9462.
Danjaryov, M. 9250.
Danka, R.G. 1452.
Dantas, M. 4425.
Danthanarayana, W. 6011.
Daoust, R.A. 861.
Dappen, G.E. 1012.
Dapples, C.C. 1144.
Daramol, A.M. 8352.
Darchen, B. 5213.
Darling, C.C. 8314.
Darlington, J.P.E.C. 8591.
Darlington, P.J. Jr. 7028.
Darrongheh, H. 3377.
Das Gupta, S.K. 4000.
Das, A.B. 3372.
Das, A.K. 3372.
Das, B.C. 1444, 7796.
Das, C.C. 1517.
Das, H.C. 7674.
Das, L.K. 9152.
Das, N.G. 782.
Das, N.R. 7674.
Das, P.C. 2851.
Das, P.K. 319, 1360, 3441, 3442.
Das, S.K. 4416, 9210.
Das, S.M. 7022.
Dasgupta, R. 9210.
Dass, C.M. 7256.
Dass, R. 7544.
Datterman, G.E. 4585, 8584.
Dauterman, W.C. 947, 3432, 5696, 5783.
Davenport, B.L. 3492.
Davey, C.G. 251, 964, 3375, 3513, 5080, 8229.
Davey, R.B. 1916, 2038, 3112, 4509, 8433, 8531.
David, B. 1368.
David, C.T. 5864.
David, E.H. 7631.
David, H. 2683.
David, J.-C. 2524.
David, J.C. 1099.
David, J.R. 1761, 7057, 7569.
Davids, C. 5433.
Davidson, E.W. 6603, 7366, 7920.
Davidson, G. 1047, 3131, 8409.
Davidson, I.H. 1627, 4843.
Davidson, L.I. 4186.
Davidson, N. 3886.
Davies, D.M. 922.
Davies, F.G. 4511, 4512.
Davies, J. 4077.
Davies, J.B. 3630.
Davies, J.C. 4557.
Davies, J.E. 1469.
Davies, R.A.H. 7768.
Davis, C.S. 6907.
Davis, C.R. 7129.
Davis, D.W. 1197.
Davis, F.M. 1101, 3240, 3822, 4087, 4088, 8022, 8024.
Davis, G.R.E. 996, 1113.
Davis, H.G. 740.
Davis, J.R. 5211, 9171.
Davis, M. 4487.
Davis, M.A. 443, 2099.
Davis, M.R. 8855.
Davis, R. 2239, 2241.
Davis, R.L. 3912.
Davis, S.A. 3022.
Davis, S.G. 2361.
Davison, R.H. 729.
Devaydova, E.D. 123, 992.
Dawid, I.B. 3081.
Dawkins, I.R. 926.
Dawson, A.F. 8478.
Dawson, D. 2614.
Dawson, J. 1376.
Dawson, P. 9387.
Day, A. 1890, 5816.
Day, J.F. 6888.
Day, J.H. 7635.
Day, M.C. 834.
Day, T.H. 6255, 6278.
Dayton, D.F. 6204.
De Aguiar Fulcao, M. 4410.
De Albuquerque, C.M.R. 3114.
De Almeida Correia, M. 4458, 5136.
De Almeida, I.M. 277.
De Almeida, J.R. 5484.
De Almeida, M.G. 5495.
De Andrade, C.F.S. 5023.
De Andrade, J.C. 4403.
De Araujo Arigony, T.H. 6505.
De Armas, L.F. 8744, 8883.
De Azevedo, E.M.V.M. 9035.
De Baar, M. 1244.
De Bach, P. 2450, 2456.
De Barjac, H. 2218, 2637, 2639, 3423.
De Barjac, M. 7369.
De Barr, G.L. 2982.
De Batista, G.C. 5781.
De Bianchi, A.G. 3516.
De Boka, J.A. 3704.
De Boni, U. 7860.
De Bortoli, S.A. 6196.
De C. Bicudo, H.E. 5464.
De C. Bicudo, H.E.M. 5446, 5459.
De Camargo, C.A. 9032.
De Campos Bicudo, H.E.M. 5452.
De Castro Gomes, A. 4498, 9223.
De Chaneet, G.C. 6889.
De Clercq, R. 9324.
De Coninck, E. 2686.
De Faria, L.G. 8289.
De Fonseca, J.P. 6002.
De Franco, D. 3061.
De Freina, J.J. 4045, 5513.
De Freitas, R.A. 7188.
De Giorgio, L. 3082.
De Godoy, A.M. 5029.
De Gregorio, R. 465.
De Haan, N. 4215, 4217.
De Jesus Cabeza, R. 4266.
De Jong, D. 3760, 4456, 5183, 5945.
De Jong, M.C.J.M. 8178, 8185.
De K. van der Linde, T.C. 5282, 5284.
De Keizer, A.N. 3328.
De Kort, C.A.D. 2584, 3479, 4164, 8106.
De L. Brooke, M. 5903.
De la Cruz, J. 3970, 8720, 8784.
De la Vega, R. 620.
De Laever, E. 650.
De Lange, H.C. 5018.
De Leon Del Rio, S. 3948.
De Ley, J. 8310.
De Long, D.M. 2439, 2440, 2444.
De Loof, A. 1767, 2721.
De Loof, A.J. 3367.
De Lourdes, M. 4458, 5136.
De Luca, E. 8967.
De Magalhães, L.E. 5481.
De Marmels, J. 3228, 8000.
De Mathaeis, E. 7863.
De Meillon, B. 8796.
De Menezes, M. 6668.
De Meninger, D.L. 351, 3389, 3605.
De Moor, P. 1380.
De Moraes, G.J. 6719.
De Moraes, R.A.O. 6222.
De Motte, P. 7611.
De Oliveira Albuquerque, D. 816.
De Oliveira Filho, A.M. 5000.
De Oliveira, A.K. 5836.
De Oliveira, J.V. 5781, 6044.
De Poinco, M.M. 5.E. 9429.
De Reggi, M. 1059, 2675.
De Reggi, M.L. 2587.
De Renobales, M. 6564.
De Scheemacker-Louis, M. 1761.
De Smet, W.H.O. 7810.
De Souza Gonçalves, I. 8926.
De Souza Lopes, H.J. 4835, 4840, 4841, 4842, 4826, 5061.
De Steven, D. 5969, 9097.
De Toledo Piza, S. Jr. 6454, 6455.
De Toledo, S.M. 7837.
De Vasquez, A.M. 667.
De Vitis, J. 6788.
De Vos, A.J. 665, 3657, 3683, 6065.
De Vos, V. 9146.
De Vries, D.H. 1055, 1056.
De Wael, L. 6610.
De Wilde, J. 3338, 3478.
De Wiltink, C.G. 1639.
Deak, I.I. 3281.
Dean, D.A. 2108, 5971.
Dean, G.A. 1228, 8392.
Dean, H.J. 3798, 6116.
Dean, P. 2939, 7664, 7667, 9319.
Deam, J.M. 2344.
Deb-Kinavay, S. 1065.
Deb, R. 8407.
Deb, C.R. 7425.
DeBach, P. 1435, 7542.
DeBarr, G.L. 400, 425.
Debolt, J.W. 2022, 8016.
DeBor, R.F. 1447.
Debrout, S. 5194.
Decamps, C. 5116.
Decelle, J. 8777.
Dedryver, C.A. 2133, 7760.
Deemering, J.C. 2410, 5567, 5642.
Deesin, T. 849, 9770, 6060.
Deelstra, B. 9108.
Deffieux, G. 2273, 2222.
DeFoliar, G.R. 3662.
DeFranco, D. 1496, 9396.
Degelmann, A. 7830.
DeGrugillier, M. 1853.
DeHeumeny, N. 8178.
Delecan, A. 1199, 6741, 7533.
Dejean, P.A. 1211.
Dejanne, D. 397.
Dejoux, C. 4546.
Del Portillo, H.A. 5191.
Del Prato, M. 5445.
Del Rio, C.M. 523.
Delage, M.A. 2587.
Delachambre, J. 1086.
Delage, A. 4655.
Delaney, A.D. 4671.
Delcomyn, J. 4958, 4963.
Delgado, Y. 9423.
Delicollie, J.C. 8797, 9480.
Deleurance, S. 205.
Delfinado-Baker, M. 2026, 3973.
Delfino, G. 6592.
Delfino, S.M. 4778, 4780.
Delgado, G. 624.
Dell, T.R. 2724.
Delmotte, C. 9484.
Deloach, C.J. 2053, 2064, 5961.
DeLoach, J.R. 1043, 1512.
Delobel, A. 4441.
Delobel, A.G.L. 4288, 4432, 6104.
DeLoach, R.C. 8379.
DeLong, D.M. 4017, 5585, 5587, 5588, 7200, 7201, 7205, 7982, 7984, 8809.
DeLoof, A. 4160.
DeLourdes, M. 4453.
DeMott, M. 938.
Delucchi, V. 6918, 7546, 7607, 7798.
Delvare, G. 864.
Delye, G. 2706.
Demaio, J.D. 5857.
DeMille, D. 9389.
Demilio, A.B. 1058, 5786.
Demina, V.T. 9046.
Demirkilik, C. 4100.
Demolins, G. 3833.
Dempsey, B. 5449.
Dempsey, D. 5843.
Den Hollander, J. 785.
Denbury, J.L. 5812, 8216, 8906, 8912.
Denecere, M. 2899.
Denelli, R.E. 6635.
Denis, C. 1103.
Denlinger, D. 3477.
Denlinger, D.L. 351, 3389, 3605.
Denmark, H.A. 1588.
Denneulin, J.C. 1059.
Denning, D.G. 8085.
Dennis, R.D. 5656.
Denno, R.F. 3563, 5911, 5956.
Deo, P.G. 5040, 5045.

- 6

- Evans, D.A. 1797, 1799, 7518.
 Evans, D.D. 6133.
 Evans, D.E. 237, 975, 3369, 6977.
 Evans, F. 7884.
 Evans, G.O. 6480.
 Evans, H.C. 3649.
 Evans, H.E. 1957, 2146, 2448, 3218, 6033, 6740, 9360.
 Evans, H.F. 2617, 4618.
 Evans, M.A. 2146, 6033.
 Evans, M.H. 3595.
 Evans, M.K. 1553.
 Evans, N. 1008, 8750.
 Evans, R.III. 4484.
 Evans, R.E. 9107.
 Evans, W.S. 8998.
 Eveleigh, E.S. 1205, 1206, 1870, 4350, 4356, 4466, 4468.
 Evenhuis, N.L. 1622, 3991, 6338, 7189, 8783, 8786.
 Ewens, P. 2328.
 Evered, R.P. 254, 973, 5867, 6576.
 Ewing, A. 4689.
 Ewing, S.A. 6598, 8137.
- Fabellar, L.T. 306.
 Fackler, S. 3932.
 Fabres, G. 440, 4104, 4429, 4528.
 Fabres, G. 1222.
 Fabritius, M. 8267.
 Fabritius, M. 8267.
 Faccini, J.L. 6334.
 Fackler, V.A. 7637.
 Fackler, S.H. 2134, 2135, 5240.
 Fagerstrom, T. 5885, 9215.
 Fahmy, I.S. 6952.
 Fain, A. 11, 92, 795, 1581, 1591, 2384, 5652, 7144, 7270, 8726, 8729.
 Fairbrother, T.E. 2233.
 Fairchild, B. 7965, 7970.
 Fairchild, W.L. 8424.
 Falcao, M. 4412.
 Falcon, L.A. 679.
 Fales, H.M. 5009.
 Falk, E.S. 1381, 2185.
 Falk, J.H. 6132.
 Falkner, F.-G. 3270.
 Fall, M. 8426.
 Fan, T.-T. 24.
 Fan, Z.D. 3197, 4559.
 Fanara, D.M. 8437.
 Fang, C.L. 45.
 Fannin, T.E. 7813.
 Fanning, I.D. 7632.
 Farag, R.S. 167.
 Faragalla, A.A. 5762, 6017.
 Farang-Asad, A. 7109.
 Fargerlund, J. 7572.
 Farid, A. 7179.
 Farhah, H.T. 6978.
 Farhah, H.T. 6971.
 Fargo, W.S. 3600, 6680.
 Farhat, A. 8972.
 Farias, G.J. 4616, 8538.
 Farine, J.-F. 9713.
 Farris, J.-H. 731, 9292.
 Farivar, M. 8177.
 Farnham, A.W. 2661.
 Faro, S.H. 397.
 Farooqi, S.I. 2462, 4872.
 Farquhar, M. 5056.
 Farr, C.A. 8255.
 Farrag, S.M. 6950.
 Farrar, P.A. 6035.
 Farrell, J.A. 453, 2256, 3801.
 Farrell, J.A.K. 6945.
 Farrer, M.H. 588, 6032.
 Farris, M.E. 7725.
 Farrow, B.A. 4451, 7601.
 Farugia, D. 833.
 Farsella, P. 2574.
 Farsuoliotis, G. 8494.
 Fathpour, H. 5272.
 Fatzinger, C.W. 1914.
 Fauchaux, M.J. 3286.
 Fauson, P. 4527.
 Faulkenberry, G.D. 6777.
 Faulkner, P. 7371.
 Fauske, G. 7917.
 Faustini, D.L. 220.
 Faustini, D.L. 8115.
 Fausto-Sterling, A. 98.
 Favel, G. 1111.
 Fawcett, D.W. 256, 257, 9007.
 Fay, F.H. 4385.
 Faye, I. 5038.
 Fazekas, I. 8674.
 Feachem, R.G. 1356.
 Federer, R. 8118.
 Federer, B.A. 4084, 5731, 8019, 8169.
 Fedorova, V.G. 9376.
 Feener, D.H., Jr. 3576, 6986.
- Feeny, P. 5233.
 Fei, R.-Z. 2895.
 Feider, Z. 156.
 Feinsod, F.M. 2583.
 Feir, D. 8025.
 Felder, D.L. 3164.
 Feldlaufer, M.F. 374.
 Feldman, M.W. 2313, 2318, 2319, 2770.
 Feldman, R.M. 1879, 3643, 3644.
 Feldman, M.A. 1549.
 Felipe, M.L. 4938.
 Felix, H. 664.
 Fell, R.D. 1237, 5411.
 Fellin, D.G. 6720.
 Felton, J.C. 6312.
 Felwell, J. 5635, 8710.
 Fenemore, P.G. 539.
 Feng, Y.-X. 3589, 9388.
 Fennah, R.G. 3214.
 Fenton, M.B. 5158.
 Fenwick, G.R. 2202.
 Feoktystov, Y.F. 6716.
 Ferenczy, J. 3803.
 Ferencz, H.-J. 2700.
 Ferencz, H.J. 1887.
 Ferguson, A.C. 1323.
 Ferguson, A.J. 5769, 9297.
 Ferguson, A.W. 5292, 8533.
 Ferguson, D.C. 7119, 7228.
 Ferguson, G.R. 4880.
 Ferikovich, S.M. 227, 2516, 4168, 4169.
 Fernandez, A. 245, 988.
 Fernandez, M.B.D. 6044.
 Fernandez Rodriguez, E. 7642.
 Fernandez Vidal, E.H. 7067.
 Fernandez-Piqueras, J. 7055.
 Ferran, A. 2545, 6474.
 Ferrar, P. 9199.
 Ferrara, F. 7246.
 Ferreira, J.J. 5271, 8421.
 Ferreira de Souza, S.C. 6743.
 Ferreira Santos, J.L. 5286.
 Ferreira, A. 5065.
 Ferreira, C. 2543, 6545, 6546.
 Ferreira, J. 5163.
 Ferreira, P.S.F. 4850.
 Ferrer, R. 2053.
 Ferris, C.D. 7513.
 Ferro, D.N. 6134.
 Ferro, G. 5559.
 Ferrucci, L. 1510, 3084.
 Ferrus, A. 1093.
 Ferwerda, M.A. 6266.
 Ferry, R.L. 3769.
 Feur, L. 167.
 Feyereisen, G.J. 4154, 4170.
 Feyereisen, R. 208, 1771, 2590, 6657.
 Fichter, B.L. 60.
 Fiedler, E.P. 7443.
 Fiedler, H. 3265.
 Field, B.I. 8117.
 Field, L.H. 136, 5020.
 Field, W.N. 1490.
 Fieldes, A.J. 764.
 Fields, W.C. Jr. 6461.
 Figueiredo, M.J. 5000.
 Filho, G.C.B. 6080.
 Finch, S. 3752, 6188.
 Fincher, G.T. 1252, 4654, 9203.
 Finelle, P. 1344.
 Fingler, B.G. 6081.
 Finke, M.D. 6725.
 Finlay, A. 4191.
 Finlayson, D.G. 717.
 Finlayson, L.H. 5851.
 Finn, A.M. 9235.
 Finnmore, D.B. 3805.
 Finnan, D.J. 7822, 9381.
 Finnetty, V. 3069.
 Finney, J.R. 9014.
 Fiori, B.J. 3720.
 Fiori, A.C. 729.
 Fisch, S.B. 3602.
 Fischbach, K.F. 156.
 Fischel-McM. 2818.
 Fischer, K. 2285.
 Fischer, M. 8057.
 Fish, D. 4478.
 Fishback, J.L. 7049.
 Fisher, C.W. 5693, 8958.
 Fisher, G.C. 298.
 Fisher, J.R. 691, 2488, 6117, 6915.
 Fisher, P.A. 4283.
 Fisher, S.G. 5432.
 Fishy, W.F. 2170, 2932.
 Fisk, F.W. 2471, 2890, 7273.
 Pitt, G.P. 1305, 3626, 3636.
 Fittin, M.G. 4946, 5591.
 Fitzgerald, T.D. 5142, 9359.
 Fitzpatrick, G.E. 2245.
 Flumara, N.J. 3696.
 Fjellberg, A. 7272.
- Flaherty, B.R. 1227.
 Flanagan, J. 1536.
 Flanagan, J.M. 8947, 8951.
 Flanagan, J.R. 2670.
 Flavell, A.J. 1494.
 Flechtman, C.H.W. 5502.
 Fleetwood, S.C. 5397.
 Fleischer, A. 8231.
 Fleischer, S.J. 8470.
 Fleming, J.E. 353.
 Fleming, T.H. 7604.
 Fletcher, B.S. 5621.
 Fletcher, D.J.C. 390, 1162, 2280, 2372.
 Fletcher, J.D. 6945.
 Fletcher, M.J. 866.
 Fletcher, R.M. 2736.
 Fletcher, T. 3912.
 Fleuriot, A. 3425, 4203, 5034, 7867, 8999.
 Flighi, W.F.G. 343.
 Flint, H.M. 418, 1476.
 Flork, R.A. 7656, 7659.
 Flores, G. 4266.
 Flotum, P.K. 5972.
 Flowers, R.W. 3166, 3207.
 Fluerg, W. 2749.
 Fluegel, P. 3339, 5001.
 Flynn, A.D. 6273.
 Focarle, A. 7621.
 Focks, D.A. 69, 387, 609, 3679, 4579.
 Foda, M.S. 997.
 Foehse, M.C. 1387.
 Fogden, A.D. 406, 2750, 4342, 5389, 4445, 5917, 8375.
 Foley, I. 243, 1791.
 Folkers, E. 2764, 5122.
 Foltz, J.L. 1687.
 Fomungh, V.C. 8286.
 Fong, A.D. 6273.
 Fonseca, A.H.D. 6334.
 Fontana, C.R.V. 7426.
 Fontanarrosa, M.E. 2002.
 Fontdevila, A. 3060, 7472.
 Fontecilla-Camps, J.C. 8174.
 Fontes, L.R. 6363, 6377, 8834, 8835, 8836, 8839.
 Foote, B.A. 622, 2779, 3150.
 Force, R.H. 4759.
 Forbes, C. 2332.
 Forbes, G.S. 6878.
 Force, D.C. 1224, 5246.
 Ford, E.B. 3918.
 Ford, I. 8119.
 Ford, M.G. 1019.
 Fordey, D. 1024.
 Fordy, M.D. 5230, 5831, 6262.
 Ford, A. 4681, 4683.
 Formanowicz, D.R., Jr. 5155.
 Formanowicz, D.R., Jr. 1293, 3863.
 Formento, A. 6474.
 Forno, I.W. 5316.
 Forquignon, F. 764.
 Forsgren, H.S. 3907.
 Fritz-Niggli, H. 1120.
 Fritz, L.C. 9017.
 Fritz, R.S. 4444, 6749, 6752.
 Froeschner, R.C. 2434, 2801.
 Frohlich, C. 5913.
 Frolow, A.N. 6659, 7050.
 Frommer, R.L. 3756, 6101.
 Fruin, J.T. 6617.
 Frye, N. 4750.
 Frye, R.D. 2208, 4089, 5627.
 Fu, G. 9406.
 Fu, W.J. 1218.
 Fu, Yi-Ling 1955.
 Fuchs, M.S. 3499.
 Fuchs, V.M.E.A. 9079.
 Fudalewicz-Niemczyk, W. 803.
 Fuehrer, E. 8132.
 Fuellep, Z. 8216.
 Fujie, J. 3913.
 Fujii-Kuriyama, Y. 3376.
 Fujie, A. 7745.
 Fujisawa, T. 5697.
 Fujishita, M. 3466.
 Fujita, T. 925, 5795, 5796.
 Fujiwara, D. 7453.
 Fujiwara, H. 4177, 8082.
 Fukui, K. 1348.
 Fukumachi, S. 2659, 5042.
 Fukumi, J. 116.
 Fukumi, Y. 8085.
 Fukuda, T. 6159.
 Fukunaga, A. 6268.
 Fukushima, S. 7021.
 Fullard, J.H. 4975, 5158, 5914.
 Fuller, M.T. 3066.
 Fuller, R.L. 3916.
 Fullup, Z. 582.
 Fulton, B.P. 8908.
- Fulton, J.P. 1824.
 Fumakoshi, S. 961.
 Funk, C.R. 5327.
 Fuortes, G. 6534.
 Furgala, B. 2213, 3731, 4595, 7762.
 Furk, C. 3922.
 Furlan, D.P. 4385.
 Furniss, M.M. 64, 3025.
 Furniss, P.R. 9199.
 Furtado, A.F. 364.
 Furuya, D. 4339.
 Furusho, K. 8435.
 Furuta, K. 7047.
 Furuya, K. 1816.
 Fussey, G.D. 6311.
 Futunaya, D.J. 6284, 8664.
 Futunaya, D.J. 1248.
 Fuxa, J.R. 2965, 5751.
 Fuzeau-Braesch, S. 1099, 3341, 4163.
 Fye, R.E. 6012, 8350.
 Fyztas, E. 7329.
- Gaeboub, I.A. 310, 360, 1038, 1042, 1832, 3588.
 Gabel, B. 352.
 Gaber, A.A. 6952.
 Gabaudo, A. 6712.
 Gabriel, A. 8066.
 Gack, C. 7501.
 Gad El Rab, M.O. 1370.
 Gadia, E.S. 2737.
 Gadzama, N.M. 213.
 Gadeike, H. 6337.
 Gafurova, V.L. 6038.
 Gail, A. 6161.
 Gajbhai, V.T. 7780.
 Gal, T. 7703.
 Galati, L. 2825, 6772.
 Galati, E.A.B. 4498, 6408, 6506, 9223.
 Galbraith, M.N. 5003.
 Galbreath, A.P. 1937.
 Galichet, A. 853.
 Galil, B. 8841.
 Galileo, M.H.M. 559.
 Galis, F. 7539.
 Galis, P.F. 2105.
 Gallant, J. 1536.
 Galloway, W.J. 3570.
 Gallego, J. 575.
 Galler, R. 5455.
 Galley, D.J. 1794, 2658, 5777.
 Galli, A.J.B. 6153.
 Gallo, A.J. 5461, 5499.
 Galliois, M. 232.
 Galloway, T.D. 3931.
 Galosi, A. 8404.
 Galun, R. 224, 974.
 Gamba, G.J. 1480, 2129, 5228, 6664, 9358.
 Ganez, R. 5037.
 Gammon, D.W. 1040.
 Gamo, S. 3447.
 Gano, Y.K. 2649.
 Gander, M.V. 8365.
 Gander, P.H. 155, 916.
 Gandhi, J.R. 7309, 7320, 7321, 7322.
 Gandhi, V.V. 5456.
 Ganea, C. 2616.
 Ganga, J. 4046.
 Gange, G. 8946.
 Ganugi, R.N. 9338.
 Gangwar, S.K. 7687, 7689, 7691, 7694.
 Ganjian, I. 2842.
 Gano, K.A. 1167.
 Gant, C.W. 1457.
 Gantt, C.W. 3243.
 Ganushkina, L.A. 9012.
 Ganushkina, L.A. 9013.
 Gan, Y.K. 2161.
 Garben, A.F.M. 4388.
 Garcia de la Vega, C. 7825.
 Garcia-Barros Saura, E. 7080.
 Garcia-Bellido, A. 5445, 6271, 8642.
 Garcia-Rodriguez, R. 7034.
 Garcia, A. 5629.
 Garcia, C. 4094, 5734, 5735, 5755, 8984.
 Garcia, E.S. 364, 1882, 8963.
 Garcia, J. 2246.
 Garcia, J.L. 8091.
 Garcia-Rodriguez, R. 7034.
 Gardenghi, G. 2669.
 Gardenghi, G. 6631.
 Gardiner, B.O.C. 3632.
 Gardiner, W.P. 1361.
 Gardner, S. 8394.

- 8

- Cuppa, J.N. 7788.
Cuppa, J.P. 784, 5466, 5503, 7175, 8251.
Cuppa, M. 4259, 7451.
Cuppa, M.L. 2430, 3897, 7036.
Cuppa, N.K. 8390.
Cuppa, R.K. 5893, 6139.
Cuppa, S.C. 2325, 6746.
Cuppa, S.K. 4765, 9259.
Cuppa, S.P. 7706.
Cuppa, T.S. 5256.
Cuppa, Y.C. 7192, 7195.
Gurudevani, P. 7046.
Gurudevani, A. 4278.
Gurevich, G.S. 9248.
Gurevich, E. 2945.
Gurjanova, T.M. 6757.
Gurumurthy, S. 4420.
Gusenleimer, J. 8832.
Gusev, G.V. 6908.
Guseva, V.S. 9198.
Guseinov, S.I. 9109.
Gustafsson, B. 4892.
Gustin, R.D. 1863.
Gutene, W.D. 4625.
Gutne, W.D. 3485, 3780, 6099, 6100, 6899, 6914, 7053, 8496, 8851, 9272, 9306.
Gutierrez Alonso, J.L. 7642.
Gutierrez Galindo, J.F. 8029, 8030.
Gutierrez, A.P. 2870, 2886, 6107, 6208.
Gutierrez, J. 4441, 8713, 9285.
Guy, R.H. 1168.
Guyne, D.T. 3532.
Gyorkos, T.W. 4386.
Gyula, E. 3656.
Gyurkovics, H. 3070, 8645.
Haack, R.A. 2016, 4333.
Haacker, B.K. 485.
Haas, G.E. 520, 2037, 4743, 5530, 6873.
Habeck, D.H. 5533.
Habib, A. 6419, 6971.
Habbulla, M. 8068.
Hackbart, K.R. 406.
Hackel, R.L. 3770.
Hackett, R.W. 1504.
Hackman, R.H. 5658.
Hackman, W. 7896.
Hackney, C.M. 8844.
Haddani, A. 9265.
Haddaway, A.B. 1072.
Haddad, N.A. 3707.
Haddock, J.D. 7813.
Hader, K.P. 7611.
Hadley, M. 9219, 9443.
Haden, P.L. 707, 883, 2607, 3273.
Hader, J.D. 2291.
Hager, K. 6265.
Hagelstrom, I. 7048.
Haelen, H. 8165.
Haenni, J.P. 4836.
Haenni, J.P. 6409, 7182.
Haes, E.C.M. 6307.
Haeseler, V. 6853.
Hafez, M. 3177, 6975.
Hagan, D.V. 1881, 8097.
Hagedorn, H.H. 3488.
Hagen, A.F. 8512, 8890.
Hagen, K.S. 1442, 1453, 9316.
Hagen, A. 6596.
Haggen, K. 1154.
Hagley, E.A.C. 2655, 4355, 7008.
Hago, B.E.D. 2924.
Hagstrum, D.W. 2025.
Hague, N.G.M. 2959.
Haide, A.A. 4214.
Haider, J. 4185.
Hajduk, S.L. 3674, 3675.
Hajek, A.E. 7121.
Hajkova, Z. 6686.
Hakim, R.S. 3462.
Halbert, S.E. 3825.
Halder, D.P. 282, 1000, 2128, 2627, 2628, 2630, 5025, 7383.
Hale, P. 2234.
Haller, C. 2327.
Haffner, G. 7484.
Haffner, V. 7484.
Halfhill, J.E. 8483.
Haligos, J. 1629.
Halikka, L. 2680.
Hall, D.G. 8581.
Hall, D.G. IV. 2097, 8506.
Hall, D.G. IV. 6164.
Hall, D.R. 862, 1465, 3354, 5871.
Hall, D.W. 2198.
Hall, G.P. 7609.
Hall, J.C. 972, 2414, 4286.
Hall, J.D. 4282.
Hall, M.J. 2221.
Hall, R.A. 1811, 4623, 8509.
Hall, R.D. 1387, 9071.
Hall, R.W. 1276, 6095, 8525.
Hall, T.A. 2552.
Hall, T.J. 1557, 6226.
Hallberg, E. 143.
Halliwell, R.E.W. 2910, 7636.
Hallman, G. 555.
Hallman, G.M. 2854.
Halpern, J. 4372, 9002, 9464, 9479.
Halstead, A.J. 2977.
Haltemann, W.A. 8323.
Hama, H. 305.
Hamale, R.J. 735, 9134.
Hamann, H.J. 1470, 8845.
Hamby, M.K. 7811.
Hamdy, B.H. 6540, 8954.
Hamed, R.R. 3316.
Hamid Miah, M.A. 6942.
Hamilton, G.C. 6151, 6485.
Hamilton, J.G. 6011.
Hamilton, J.T. 728.
Hamilton, K.G. 3134.
Hamilton, K.G.A. 3212, 8812.
Hamilton, R.W. 6488.
Hamlen, R.A. 2205.
Hamm, J.J. 5746, 5752, 9011.
Hammad, S.M. 6056.
Hammock, B.D. 939, 2723, 5790, 8327.
Hammock, D. 206.
Hammond, A.M. Jr. 8516.
Hammond, P.M. 5509.
Hammond, P.S. 5986.
Hammond, R.B. 3781, 6939.
Hammett, A.F. 2590.
Hamondrakas, S.J. 3510, 5825.
Hamon, C. 2499.
Hampton, E.N. 8017.
Ham, C.-S. 8166.
Hancock, D.L. 8789.
Hand, S.C. 6927.
Handel, S.N. 3602.
Hansen, B. 1381.
Hangay, G. 8704.
Haniffa, M.A. 2693.
Haniotakis, G.E. 3006, 5005.
Hanks, L.M. 315.
Hanna, M. 2363, 7786.
Hanna, P.J. 2429.
Hanneman, R.E. Jr. 1285.
Hanny, B. 6202.
Hanny, B.W. 721.
Hannan, S.A. 1002.
Hannay, W.P. 1527.
Hanschke, R. 5724.
Hansell, M.H. 2278, 3551.
Hansen, B.L. 177.
Hansen, G.N. 177.
Hansen, H. 4331.
Hansen, J.D. 3653, 5899.
Hansen, K. 626.
Hansen, K.N. 2539.
Hansen, M. 7170.
Hansen, M.K. 2070.
Hansen, S.R. 7024, 9370.
Hansen, T.E. 6560.
Hansens, E. 2336.
Hansens, E.J. 2151, 6710.
Hanski, I. 5239, 8377.
Hansson, L. 8641.
Hanula, J.L. 400, 8491.
Hapase, D.G. 5376.
Happner, K.D. 157, 3307.
Happ, G.M. 4181.
Haq, M.A. 1875.
Haq, N. 739.
Hara, A.H. 287, 2953.
Harada, M. 5950.
Haralson, M.A. 3075.
Harbo, J.R. 375, 452, 1877, 1878, 8300, 8553.
Harcoort, D.D. 7753, 3238, 5628.
Harder, L.D. 8895.
Hardie, J. 2533.
Hardie, R.C. 4968, 4971.
Hardin, B. 1421, 7333, 7715.
Harding, J.A. 1474, 4635.
Harding, P.T. 2120.
Hardman, J.A. 8341.
Hardy, A.R. 4775, 5532.
Hardy, D.E. 821.
Hardy, J.L. 189, 6547, 9236.
Hardy, N.G. 713, 1427.
Hardy, R.J. 680.
Hardy, R.W. 3903.
Harcin, P.K. 3783.
Harewood, N.W. 5910.
Hargrove, J.W. 2784, 2852.
Harradass, E.T. 158, 252.
Harmasuta, C. 6060.
Harvama, T. 7300.
Hartian, D.P. 2192, 2193, 4544.
Hartian, H.J. 504, 1831.
Harley, K.L.S. 5316.
Harnan, G.E. 1136, 5860.
Harnisch, R. 2987.
Harnish, D.G. 6549, 6550, 7313.
Haro, A. 8091.
Harper, A.M. 3637, 6970.
Harper, F. 1577.
Harper, J.D. 2236.
Harper, M.W. 6315.
Harper, P.P. 1577.
Harprad, K.A. 2619, 3396.
Hartell, E.A. 1943, 2491.
Hartell, M.O. 8305.
Hartewijn, P. 1978.
Harriman, R. 8607.
Harrington, B.J. 1865, 1904, 4857, 5816.
Harris, R.C. 4233, 8665.
Harris, E.G. 1072.
Harris, E.J. 4616, 6136, 8020, 8538.
Harris, J.W.E. 8478.
Harris, K.M. 1624, 4831.
Harris, M.K. 2265, 8855.
Harris, P.V. 3902, 5444, 7030.
Harris, R. 899.
Harris, R.L. 1989, 2116, 4481.
Harris, S.C. 2495, 7018, 8693, 8694, 8695.
Harris, V.E. 5936, 8271.
Harrison, A.D. 3856, 6224, 8604.
Harrison, B.A. 1820, 5749, 6479, 9408.
Harrison, B.D. 3395.
Harrison, F.P. 4611, 8536.
Harrison, J.B. 9091.
Harrison, J.S. 2006.
Harrison, M.D. 1446, 3424.
Harry, P. 3515.
Hart, J.R. 7445.
Hart, W. 5800.
Hart, W. 2189, 2818, 3529, 4844, 8855.
Hartenstein, R. 9368.
Hart, D. 3069.
Hart, D.L. 3871.
Hartley, G.C. 3243.
Hartley, J.C. 8240.
Hartner, R.L. 5195.
Hartman, H.B. 2538.
Hartman, M.J. 6721.
Hartmann, G.C. 1471, 5741.
Hartstack, A.W. 2203, 2242, 3016.
Hartstack, A.W. Jr. 1475, 3627, 6015.
Hartway, A.W. 2470.
Harvey, D.J. 7600.
Harvey, J. 312, 1069, 6202.
Harvey, T.L. 3688, 3770.
Harvey, W.R. 3324, 8081.
Harville, B.G. 1970.
Hartz, K. 4701.
Hass, S.B. 5040, 5045.
Hasegawa, J. 7021.
Hasegawa, K. 3474.
Hassan, M.R. 6653, 6964.
Hassan, S. 7379.
Hassan, S.A. 4091.
Hassanen, M.A.T. 1038.
Hassell, M.P. 3575, 7665, 8388.
Hasey, M. 2370.
Hastings, A. 7596.
Hatakeyama, S. 5437, 7021.
Hatch, C.R. 3601.
Hatchett, J.H. 2191.
Hatfield, D. 5163.
Hauer, F.R. 1714, 9373.
Haukoja, E. 4327.
Hauschild, K.I. 6108.
Hausechteck-Jungen, E. 6262.
Hausen, K. 140, 907.
Hawes, E.W. 2997.
Haustein, D. 58, 5656.
Hayas, M. 6696.
Haverty, M.I. 585.
Haverty, M.I. 296, 2137, 4606, 4615, 5785, 8325, 8542, 8554, 9321.
Hawkeswood, T.J. 2093.
Hawkins, B. 6754.
Hawkins, B.A. 6048, 7963.
Hayakawa, Y. 6563.
Hayakawa, T. 5783.
Hayashi, H. 4891.
Hayashi, K. 2705, 5012.
Hayashi, M. 1609, 4016, 8814.
Hayashi, S. 2596, 4671, 9396.
Hayashida, K. 959.
Hayat, M. 4024.
Haycock, R.J. 6827.
Haycock, R.P. 2934.
Hayes, D.K. 1744, 8211.
Hayes, J. 5271, 8421.
Hayes, J.L. 6707, 7250, 7517.
Hayes, M.J. 9344.
Hayes, T.K. 1774.
Haymer, D.S. 3871.
Haynes, C. 9276.
Haynes, D.L. 6094, 7928.
Haynes, J.V. 1123.
Haynes, J.W. 2225, 3486, 9053.
Haynes, K.F. 1788, 2187.
Haynes, R.F. 7885, 9454.
Hazan, A. 4639.
Hazel, W.N. 6293.
Hazza, A.K. 5253, 5254.
He, L.-F. 1218.
He, Y.-S. 1778.
He, Y.-Z. 2781.
Healey, M.C. 7140.
Heaps, J.V. 2284.
Heath, H. 5166.
Heath, A.C.G. 1175.
Heath, J. 2118, 2120.
Heath, L.A.F. 8156.
Heath, R.R. 2585.
Hebrard, G. 5269.
Hecker, H. 923.
Heckford, R.J. 4925.
Hedberg, C. 4492.
Hedden, R.L. 683, 4313.
Hedemann, R. 2482.
Hedger, G.H. 2220.
Hedlin, A.F. 6641.
Heed, B.W. 406, 4342, 4389, 5917.
Heeders, W.J. 7291.
Hefetz, A. 7007.
Heff, J.L. 9358.
Heffner, H. 8270.
Heffner, R. 8270.
Hegazi, E.M. 7591.
Hegdekar, B.M. 3319.
Hejnits, C.F. 5433.
Heilmann, M.D. 9155.
Heinicke, W. 7072.
Heinicke, W.C. 1573.
Heinrich, B. 240, 3543.
Heinrich, J.J. R. 3099.
Heinrichs, E.A. 306, 307, 522, 4082, 5391, 6111, 6122, 6162, 6197, 6199, 8537, 8569.
Heise, E.A. 8405.
Heisenberg, M. 6683.
Heiser, R.L. 5158.
Heiss, E. 4010, 4011, 4859.
Heiss, J.S. 4551.
Heitz, J.R. 1041, 2233, 3433, 5788.
Heutz, R.L. 5644, 7263.
Hekal, A.M. 6771.
Held, J.W. 1466.
Held, J.R. 6263.
Held, T. 4210.
Helgesen, R.G. 450.
Helias, C.L. 4126.
Heliocvaara, K. 1960, 5217, 5934.
Hella, J.J. 9403.
Heller, H. 4713.
Helle, M. 4750.
Helle, W. 3086.
Hellenhalt, R.A. 85.
Heller-Haupt, A. 9276.
Helm, C.G. 8511, 9226.
Helm, K.F. 1264.
Hemphill, S.C. 3756, 6101, 7671, 8127, 8129.
Hemenway, R.C. Jr. 587.
Henderson, N.C. 7297.
Hendricks, A.C. 4658.
Hendricks, D.E. 2203.
Hendricks, Z.H. 6103, 9331.
Hendry, D.A. 3030.
Hendry, D.A. 5786.
Henkoff, S. 7840.
Henneberry, T.J. 1096, 2688, 3021, 3765, 6013, 6157, 6167.
Hennings, R.D. 1726, 4108.
Hennig, W. 2304, 9386.
Henrick, C.A. 1783, 3709.
Henry, C.S. 5853.
Henry, F.E. 1398, 3813, 4115.
Henry, T.J. 32, 2435, 3947, 5534, 5579, 5581, 5586.
Henschen, A. 8925.
Hensley, S.D. 5941.
Hentschel, E. 8743.
Henzel, W. 884.
Heong, K.L. 4367.
Heppner, H.R. 5317.
Heppner, J.B. 1659, 1660, 2464, 5161, 4888, 5605, 6297, 7224.
Heppner, J.B. (continued) 7925.
Herakly, F.A. 6419.
Herakly, K. 959.
Herath, P.R.J. 1047, 3131.
Herbers, J.M. 1304.
Herbert, E.W. Jr. 1407, 8233.
Herbert, F.A. 3677.
Herbert, H.J. 3555, 8214.
Herbert, L. 4538.
Herbert, L.V. 5263.
Herbert, R.H. 8114.
Herczeg, E. 8704.
Herdicks, D.K. 54.
Herman, G.A. 2909.
Herman, J. 5880.
Herman, W.S. 350, 2713, 4275, 5094.
Hernandez-Rodriguez, S. 8045.
Hernandez-Rodriguez, S. 8336.
Hernandez, T. 6936.
Herrer, A. 653.
Herrick, O.W. 674.
Herskovitz, K. 7334.
Hertlein, C. 660.
Hervatin, L. 5060, 5423.
Hervouet, J.-P. 9264.
Herzog, D.C. 2003, 9353.
Hess, R.T. 5744, 8170.
Hesse, B. 4279.
Hesse, L.W. 8611.
Hetsnarske, K. 1758.
Hetrnarske, K.L. 1768.
Heuch, I. 7056.
Hewings, A.D. 2178.
Hewings, B. 4634, 5994.
Hewitt, M. 8412.
Hewitt, P.H. 931, 5282, 5284, 6825.
Heyd, S. 3922.
Heykal, I.H. 6974.
Hibino, H. 7376, 8149.
Hicks, J. 5266.
Hick, R.W. 9317.
Hidaka, T. 3272, 7487, 7488.
Higashi, K. 8612.
Higgins, L.G. 1661, 5138.
Highland, H.A. 1696.
Highton, R.B. 1466.
Higuer, L.W.G. 1574.
Hihara, F. 5858.
Hikichi, A. 2655.
Hilder, T.B. 549.
Hileman, D.R. 530.
Hille, P.D. 7013.
Hilgenberg, J.R. 4390, 8357.
Hilly, P.L. 7554.
Hill, A.S. 214, 219, 1782, 2244.
Hill, D. 2612.
Hill, K.K. 3295.
Hill, L. 8875.
Hill, M.K. 6708, 6747, 6941.
Hill, W.B. 8498.
Hill, W.G. 5441.
Hillerton, E.L. 7283.
Hillhouse, T.L. 445.
Hillier, P.C. 6255.
Hillier, A.J. 7848, 7854, 8636.
Hillis, J.R. 7885, 9454.
Hilmy, A.M. 6571.
Hilshenoff, W.L. 4819, 7278.
Hilton, D.F.J. 4328, 4386, 4440.
Hink, W.F. 7392, 8144.
Hinton, C.W. 3098.
Hinz, P.N. 6120.
Hippa, H. 4473, 6412, 7152.
Hirai, K. 2511.
Hirai, Y. 961, 2665.
Hirazuimi, Y. 3071, 3126.
Hirano, C. 1163, 2229.
Hirano, K. 3245.
Hirao, A. 1443.
Hirashima, Y. 1451, 1656, 2445, 4020, 4885.
Hiratan, M. 6055.
Hirn, M.H. 2587.
Hironori, T. 1736.
Hirooka, Y. 3258.
Hirose, C. 1060.
Hirose, A. 4663.
Hirota, T. 8435.
Hiroyoshi, T. 6555.
Hiryuki, T. 628.
Hirsch, J. 627.
Hirsch, J.T. 9078.
Hiruma, K. 3387, 3391, 7327.
Hirvenoja, M. 2424, 4837.
Hislop, R.G. 5046, 5131.
Hislop, R.T.G. 2156.
Hitchock, H.L. 198.
Hitchock, J.C. 6406.
Hitchen, J.M. 1490.
Hiyori, T. 7485.
Ho, D.T. 6197.
Ho, O.K. 5766.
Ho, S.H. 5777.
Ho, T.M. 5947, 6056.

Author Index

- Hobbs, H.A. 7658
Hobson-Frohock, A. 2202
Hoch, A.L. 625
Hochberg, J. 84, 2505
Hockin, D.C. 8362
Hoda, F.M. 6961
Hodek, I. 7461
Hodges, C.M. 495
Hodges, H.F. 3035
Hodges, R.W. 4759
Hodgson, C.J. 3830
Hodgson, E. 6554
Hodkinson, I.D. 2438
Hodkova, M. 2711, 8225, 9052
Hodson, A.C. 7595
Hoebeke, E.R. 790, 2472, 4397, 5525, 6332
Hoeijmakers, J.H.H. 8627
Hoedobler, B. 1999
Hoedobler, B. 5999, 8977, 8978
Hoelzel, H. 4059, 4060
Hoernberg, H.F. 949
Hoernqvist, R. 648
Hoffman, D.R. 1325, 1365
Hoffmann, D. 1818, 4192
Hoffmann, D.F. 267, 501, 5739, 5759
Hoffmann, F.M. 9416
Hoffmann, J. 411
Hoffmann, J.A. 3345, 3515
Hoffmann, K.H. 8093
Hoffmann, M.K. 6165
Hoffmann, P. 868
Hoffmaster, D.K. 4320, 9117
Hoffmann, A. 4051
Hogeweg, P. 5419
Hogg, D.B. 1089, 6031, 6107
Hogness, D.S. 3065
Hokkanen, T. 9162
Holbert, D. 8137
Holden, J.J. 3070
Holt, B.D. 1073
Hollobour, S.N. 6800
Holsova, V. 5987
Holland, R. 5529
Hollander, A.L. 5013, 5699
Hollenberg, C.P. 7829, 7830
Holliday, N.J. 4355, 6840, 7008
Hollingsworth, G.S. 8505
Hollingsworth, K.A. 1473
Hollingsworth, N.M. 9387
Holloway, J.D. 4461, 6079
Holm, D.G. 7848, 8640
Holm, E. 9205
Holm, T.F. 7026
Holman, G.M. 3283, 4125
Holman, J. 6808
Holman, P.J. 875
Holmberg, R.G. 4349
Holmen, M. 5516
Holm, C.D. 8464
Holmes, R.S. 5695
Holscher, K.H. 4758
Holst, H. 4175, 5713
Holt, V.A. 1933
Holter, P. 9211
Holtkamp, R.H. 3774
Holyst, C.W. 9005
Holzapfel, C.M. 348
Holzenthal, R.W. 5612, 8693, 8694, 8695
Homer, J.T. 4997, 5276
Homolac, M. 6894
Homsher, P.J. 1547, 2614
Honda, H. 1912
Honda, K. 1094, 2602, 2611
Honda, S.M. 1501
Hondo, M. 2165
Honegger, H.W. 2534
Hooke, A. 2865, 6852, 7461, 7462, 9191
Hong, N.T. 7881
Hong, T.-H. 8935
Hongo-Allegro, P. 4684
Honjo, K. 6251
Honma, K. 1241
Hosouchi, K. 7302
Hoogeveen, J.C. 469
Hoogenstraal, H. 309, 3259
Hook, A. 1901, 1957, 2146, 5165, 6033, 6676
Hook, A.W. 1968
Hook, C. 3671
Hooker, M.E. 2032
Hooper, G.H.S. 2480, 3030
Hoom, A.J. 1541
Hopkins, S.P. 8186
Hopkins, A.R. 4854, 4612, 8519, 8582
Hopkins, L.C. 4551
Hopkins, T.L. 1382, 3490, 6519, 9042
Hoppe, T. 6921
Hopper, H.P. 6435
Hopper, J. 3887
Horia, B.S. 6951
Horak, I.G. 9146, 9247
Horak, I. 6375, 8749
Horak, M. 838
Horber, E.K. 2055
Hori, K. 185, 2551, 3311, 5676
Hori, M. 1790
Hori, S.H. 3067
Horikie, M. 1163
Horn, B.W. 2624, 2645
Horn, D.H.S. 5003
Horn, D.J. 533
Horn, E. 7299
Hornby, J. 6601
Horowitz, M.A. 2, 8475
Horrige, G.A. 147
Horsburgh, L.L. 4916, 8219
Horstmann, K. 3841, 4026, 4870
Horton, C.C. 1990
Horton, D.L. 716
Horton, I.F. 2480
Hosbach, H.A. 1496
Hoshida, H. 1546
Hoshikawa, T. 2788
Hosick, J.M. 6551
Hosny, M.M. 6972, 6973
Hostetter, D.L. 3450, 8457
Hostetter, N. 2944
Hoskins, P.G. 1028, 1804
Hoskins, H.C. 1545
Hoti, S.L. 6599
Hou, R.F. 3239, 8307
Hough, J.A. 1136, 5860
Hough, L.F. 5312
Hough, E.J. 89, 6547
Houlihan, D.F. 2718
Housden, S.D. 6823
House, A.P.R. 3667
House, G.J. 259, 1174
House, V.S. 4383
Houseman, J.G. 1760, 8950
Houseman, M.W. 1679, 4593, 6187, 7785, 8323, 8329
Houston, T.F. 4022, 4749, 8927
Houston, W.W.K. 5894
Hovermale, C.H. 1273
Hovore, B. 5455
Hovore, F.T. 5981, 7957
How, R.A. 6776
Howard, C.A. 608
Howard, D.F. 1992, 6734
Howard, E.B. 4488
Howard, F.W. 1637, 3297, 4535
Howard, G.C. 3874
Howard, H.W. 2342
Howard, R. 2137
Howard, R.W. 585, 1795, 5655
Howarth, F.G. 2607
Howden, A.T. 2769
Howden, H.F. 2404, 2769, 6376
Howell, C.J. 669
Howell, D.A. 4172
Howell, F.G. 5876
Howell, H.N. Jr. 3247
Howell, J. 1406, 2968
Howell, J.F. 2665, 3785
Howell, J.O. 8763, 1644
Howell, W.L. 1715, 1722
Howe, A.A. 391
Hower, A.A. Jr. 1873
Howes, E.A. 4076
Howie, R.I. 1828
Howse, P.E. 1799
Hoxie, R.P. 1112, 9328
Hoy, J.B. 2149
Hoy, M.A. 5493, 5807, 6905, 8170, 8863
Hrly, I. 6647
Hristova, E.N. 3557
Hrivnak, L. 7502, 1179
Hromádka, L. 7952
Hrubá, K.L. 2475
Hsiao, C.-Y. 43
Hsiao, K.-H. 2429
Hsue, C.L. 8099, 8190
Hsue, W.-C. 813, 820
Hu, C. 36
Hu, D.-G. 8986
Hu, J.-H. 4230
Hu, J.H. 57
Huacuja, A.H. 3980
Huang, C.-H. 5381
Huang, D.-P. 1013
Huang, G.-C. 492
Huang, L. W. 4646
Huang, M. T. 9226
Huang, P. 510
Huang, S.-R. 1778
Huang, W.-C. 2974
Huang, X.-T. 1778
Huang, Y.-M. 6406
Huang, P.-J. 4685
Hubbard, H.B. Jr. 8472
Hubbard, M.D. 4847, 7975
Hubbell, G.L. 6108
Huber, F. 8909
Huber, H.E. 7365
Huber, J. 3394, 3708
Huber, J.T. 2950
Huber, T.R. 1862
Hubert, M. 8900
Huddart, H. 4122
Huddleston, E.W. 488, 604, 3653, 5899, 6212, 8284, 8374, 8575
Huddleston, P.M. 8528
Hudson, A. 68, 2667, 8660
Hudson, M.J. 1743
Hudson, P. 1678
Hue, B. 3280, 8066
Hueber, E. 326, 393, 1130, 3512
Huerta, C. 7484
Huffman, J.B. 1810
Huger, A.M. 7379
Huggins, J.L. 7053
Huggert, L. 4035, 4868, 4883, 7894
Huggins, D.G. 7023
Hughes, A.L. 1895
Hughes, G. 1369, 5986
Hughes, J.M. 7923
Hughes, J.W. 1409
Hughes, P.B. 3132
Hughes, P.R. 1036, 2153, 6782
Hughes, R.D. 1376
Hukuhara, T. 2549, 2550
Hulbert, J.L. 4845
Hulden, L. 7898
Hull, M. 7081
Hulme, P.D. 9447
Hulmar, D.W. 203, 1818
Humber, R.A. 4197
Hummel, H.E. 1787
Humphreys, W.F. 852, 887, 6776
Hung, A.C.F. 3078
Hung, C.-Y. 8190
Hung, C.Y. 4222
Hung, M. 4662
Hung, M.C. 1500
Hung, N.T. 8425
Hunt, G.R. 629
Hunt, G.R. 627
Hunt, J. 2012
Hunt, J.A. 1557
Hunt, R.C. 8991
Hunt, R.P. 6825
Hunter, D.M. 2557
Huntley, C.C. 8405
Hurd, L.E. 2906
Hurd, P.D. Jr. 93, 7007
Hury, M. 8188
Hurn, A.D. 3150
Husain, M. 6942
Husain, T. 7212, 8816
Hussain, M.A. 315
Hussein, M.F. 6891
Hussey, R. 910
Hutasee, F. 7436
Hutchins, R.F.N. 247, 1802, 3382
Hutchinson, G.E. 1486
Hutchinson, T.C. 6696
Hutton, A.M. 6405
Hutty, R.B. 3785
Hutty, R.A. 4421
Hux, M. 6006
Huxoll, D.L. 8135
Huybrechts, R. 1767, 2721, 3367
Huybrechts, P.M. 5841
Hwang, Y.-S. 5859
Hyche, L.L. 9099
Hyer, A.H. 1903
Hynes, H.B.N. 2476, 5609
Iannuzzi, J. 2970
Iatrou, K. 6249
Ibar, G.C. 1528
Ibrahim, A.A. 6975
Ichijo, N. 4463
Ichinose, T. 3594
Idar, M. 4038, 4724
Ideker, J. 9118
Ido, H. 5852
Idris, M. 7330
Iga, M. 2738
Igarashi, A. 1348
Iguchi, I. 5761
Ignoffo, M.C. 1728, 2512, 3450, 4094, 5618, 5734, 5735, 5755, 8852, 8984
Ida, Y. 2593, 3831
Idawa, T. 7497
Ikbe, K. 5753
Ikbeuchi, M. 1515, 3100
Ikeda, H. 5852
Ikeda, R. 8462
Ikeda, T. 210, 1928
Ikeda, N. 210, 2690
Ikemura, H. 8628
Ikeshoji, T. 913, 3358, 3580
Iinskaya, N.B. 761
Ilynskaya, N.B. 7847
Idefonse, M. 5055
Ikai, M.A. 447
Ilki, J. 5982
Illyg, U. 8925
Ilyashchenko, V.I. 6497
Ilyin, Yu. V. 9382
Imai, T. 2562
Imajoh, S. 1565
Imakasa, S. 8773
Imbabi, S.E. 2923
Imboden, H. 3514
Imbaga, M.O. 5689
Immerman, R. 8416
Imperatriz-Fonseca, V.L. 6996
Imura, O. 3640, 3916, 7350, 8217
Inagaki, S. 1821
Inahara, N. 8776
Inayamallah, C. 2979
Indert, S. 6508
Indik, Z.K. 6244
Inglad, P.W. 8643
Ingle, S.J. 8855
Inglis, D.S. 634
Ingolia, T.D. 7834, 8629
Ingram, K.T. 2003
Ingram, W.R. 2810
Injiao, H. 1130
Injean, H. 4276
Ioan, I. 5749
Inoko, H. 3300
Inokuchi, T. 2709
Inoue, H. 7498
Inoue, S. 6555
Inouye, D.W. 9164
Inoué, S.C. 7791
Ioane, I. 5348, 6184
Iqbal, Q.J. 8972
Ireland, L. 7861
Ireland, R. 168
Ireland, R.C. 7835
Irish, M. 5312
Irmler, U. 1616, 7958
Irungu, L.W. 3567
Irvine, A.D. 1455
Irvine, D.J. 1717
Irvine, M.E. 3825
Isaka, J.A. 4455
Isaev, V.A. 9411
Isaka, Y. 2690
Isart, B.F. 971
Isaur, A. 3919
Isenhour, D.J. 1253, 2138, 3613, 5322, 9069
Isib-Horvewez, D. 3070, 6246, 8645
Isaaya, I. 1064, 1839, 6130
Isanbakhshzhar, B.M. 620
Isbay, J. 745
Isbay, J.S. 3272, 3842, 4118, 4231, 4498, 6884
Isbb, K. 9382
Isbb, K. 8684
Ischur, R. 2800
Ishtu, A. 2913, 8410
Ishtu, T. 218
Ishtukawa, H. 4717, 4686, 8082
Ishtukawa, I. 5336
Ishtukawa, Y. 913, 3358, 3580
Ishtukawa, H. 3466, 8980
Ishtuk, K. 3684
Ismail, I. 6949
Ismail, M.T. 1355
Ismail, S. 1099, 5947
Ismailova, L.I. 6038
Ismah, M.B. 5793
Isobe, K. 7457
Isobe, M. 2562
Isogai, A. 3360, 7529
Issel, C.J. 1329
Isivan, K. 3656
Istemes, J. 7532
Ito, J. 1326, 6080
Ito, N. 9049
Ito, K. 1443, 2340
Ito, M. 5519
Ito, S. 6515
Ito, T. 1060, 2709, 8445
Ito, Y. 2142, 6087, 6109
Itoh, T. 5697
Ivanich, E.P. 7608
Ivanov, D.D. 6522
Ivobijaro, M.F. 676
Ives, P.M. 2869, 2871, 2877, 2878, 2886
Ivey, M.C. 4520
Ivey, G.W. 4520, 6578
Ivey, M.A. 2066
Iwanaga, T.O. 925
Iwanek, K.H. 1470, 8845
Iwasa, Y. 3048
Iwata, T. 305
Iwata, M.O.E. 2150
Iyer, R. 2807, 6628
Izhar, Y. 2945, 3390
Izquierdo, M. 7826
Izquierdo, M.L. 8111
Jabbar, A. 9161
Jabben, M. 2850
Jaccard, M. 9169
Jacaki, L.E. 8349
Jacaki, L.E.N. 3721
Jacaki, L.N. 2052
Jackson, M. 456
Jackson, J.A. 2265
Jackson, B.S. 2107, 5523
Jackson, C.G. 1894, 4604, 8384
Jackson, D.M. 8277
Jackson, G.S. 1280
Jackson, L.L. 1729
Jackson, M.J. 3590
Jackson, R.R. 404, 1212, 3839, 4287, 4343, 5668, 6663
Jackson, S.M. 9450
Jackson, T.A. 5723
Jacob, A. 1001, 1805, 1815
Jacob, S.A. 6924
Jacob, U. 3852
Jacobs, R.M. 5685
Jacobson, B. 962
Jacobson, H.R. 5558
Jacobson, K.B. 8947, 8951
Jacobson, M. 226, 2252
Jacobson, N.R. 2336
Jacobson, J.R. 2257
Jacquemard, P. 3419
Jacquemart, S. 7243
Jacques, A.R. 1195
Jacques, R.P. 4190
Jadav, L.D. 7411
Jadhav, S. 754
Jaeckle, H. 1085
Jaemike, J. 8258, 9435
Jaenson, T.G.T. 2479, 4351
Jaervi, T. 9214
Jafri, R.H. 2554, 8993
Jago, N. 1669
Jain, T.C. 7311
Jain, J. 7701
Jainmovich, E. 5055
Jain, C. 1242
Jain, A.K. 5328
Jain, H.K. 5326, 7756, 7758, 7780, 7812
Jain, S. 2612
Jain, T.C. 7311
Jain, J. 7701
Jainmola, S.S. 7475, 7779
Jallion, J.M. 943
Jambulingam, P. 654
James, A.A. 767, 1106
James, B.D. 6638
James, D.G. 3610
James, R.L. 7551
James, W. 4584, 4612, 8519, 8582
Jambnack, H. 1817, 1842, 3005
Jammura, R. 2638
Jan, L.Y. 8913
Jan, Y.N. 8913
Janardanan, K.P. 4182
Janca, F.C. 3095
Jancloes, M. 9239
Janda, V. Jr. 8941
Janes, E. 4633
Janes, R.F. 2661
Janetos, A.A. 3170
Jang, E.B. 8094, 8956
Janick, J. 5312
Jankovic, M. 566
Jansen, A.M. 4933
Jansson, A. 1635, 4748, 5576, 8800
Janzen, D.H. 1966, 3436, 5973
Janzon, L.A. 8040
Jaques, R.M. 1487
Jaques, R.P. 8440
Jarolim, V. 6647
Jaronska, S.T. 4513
Jarrell, K.F. 4198, 5738
Jarrett, P. 5300, 5733
Jarvis, J.L. 3780, 6085, 8496, 9301
Jas, J. 9176
Jat, N.R. 7747
Jaworska, T. 9021
Jay, S.C. 8523
Jayakar, S.D. 772
Jayanthi, K.P. 1746
Jayaraj, S. 1027, 6751
Jayaraman, K. 1801, 2795, 4308, 5015, 5717, 6984
Jebamoni Rahindra, R. 1027, 6751
Jedlicka, L. 1629
Jedlinski, H. 7649
Jedryczkowski, W. 788
Jeevaratnam, K. 677, 4532
Jefferson, M.C. 2737
Jeffery, J. 3334, 5933
Jeffords, M.R. 7590, 8511, 9277

- Jelinek, J. 6366, 8750, 8759.
 Jellison, W.L. 4295.
 Jenni, J.N. 8868, 9352.
 Jenni, L. 2915.
 Jennings, A.L. 8740.
 Jennings, D.M. 3413.
 Jennings, D.T. 1679, 4405, 4593, 8323, 8329.
 Jennings, M. 3412.
 Jensen, G. 3156.
 Jensen, P.V. 177.
 Jensen, T.S. 5906.
 Jensen, G. 3835.
 Jepsen, P.C. 8391.
 Jermy, T. 521.
 Jermy, M.A. 157.
 Jerrett, P.A. 5161.
 Jessen, K. 476.
 Jessop, N. 2980.
 Jesus Luzazo, F. 4398.
 Jiu, M.H. 499, 2502.
 Jevaraman, K. 8453.
 Jewell, D. 859.
 Jewell, J.E. 1035.
 Jian, W.-B. 4685.
 Jiang, G.H. 562.
 Jiao, Z. 3750.
 Jimenez Gonzalez, A. 8047, 8334.
 Jimenez, F. 8648.
 Jimenez, M. 7353.
 Jin, C.-F. 2422.
 Jiron, L.F. 5166.
 Joern, A. 4171, 6853.
 Joesten, M.E. 7353.
 Johnson, C.A. 4577, 6177.
 Johnson, J. 3384.
 John, B. 6260.
 John, P. 8975.
 John, P.A. 2948, 2949.
 John, V.T. 761.
 Johnson, J.O. 430.
 Johnson, P. 780, 4747.
 Johnson, B.K. 1466.
 Johnson, C.A. 7634.
 Johnson, C.D. 1284, 1388, 5102, 5973, 6854, 7954, 9183.
 Johnson, C.G. 3630.
 Johnson, D. 9057.
 Johnson, D.E. 879.
 Johnson, D.R. 3794, 4605, 8472, 9274.
 Johnson, D.T. 560, 4551.
 Johnson, D.W. 1924.
 Johnson, G. 1771, 3069.
 Johnson, G.D. 2713, 4601, 6471, 8546.
 Johnson, G.N. 704.
 Johnson, J.H. 2131.
 Johnson, J.J. 4084, 8019.
 Johnson, J.W. 4588, 6447, 7226, 8549.
 Johnson, K.G. 1333.
 Johnson, K.J.R. 2053.
 Johnson, L. 2037, 5530.
 Johnson, L.K. 6658.
 Johnson, M. 1880, 2830.
 Johnson, M.C. 3416.
 Johnson, M.W. 6163, 6165, 9290.
 Johnson, N.F. 2066, 8314.
 Johnson, D.A. 2328.
 Johnson, P.C. 1169.
 Johnson, R. 2491.
 Johnson, R.A. 2809, 2967, 4460.
 Johnson, S.B. 1139, 3577.
 Johnson, T.J. 3402, 8443, 8454.
 Johnson, V. 845, 1664.
 Johnson, W.E. 3927.
 Johnson, W.L. 8528.
 Johnston, D.E. 4709, 6502.
 Johnston, J.S. 8018.
 Johnston, J.W. 201.
 Johnston, L.A.Y. 2934.
 Johnston, L.B. 1035.
 Johnstone, D.R. 4596.
 Johnstone, G.R. 3837, 6097.
 Jolley, P.M. 6156.
 Joly, R. 1090.
 Jomni, G. 8096.
 Jonsson, T. 7486.
 Jonathan, J.K. 7208.
 Jones, A. 1233, 3719, 6936.
 Jones, A.L. 4092, 8517.
 Jones, B.E. 8431.
 Jones, B.G. 8339.
 Jones, C.W. 1497, 1492.
 Jones, D. 202, 1107, 1725, 2723, 6763, 8327, 8550.
 Jones, D.S. 7280.
 Jones, E.H. 511.
 Jones, G. 1107, 1725, 2723, 6763, 8327.
 Jones, J.C. 2798.
 Jones, J.S. 3127, 6814.
 Jones, J.W. 2003.
 Jones, K.C. 5294, 6096.
 Jones, M.D.R. 8279.
 Jones, M.G. 1221, 1228.
 Jones, R.E. 7445.
 Jones, R.H. 442, 853, 2103, 4510.
 Jones, R.L. 3495.
 Jones, R.M. 2279, 3049.
 Jones, R.W. 253.
 Jones, S.L. 4383.
 Jones, T.H. 259, 6734.
 Jones, W.A., Jr. 455.
 Jones, W.T. 7538.
 Joost, W. 4716.
 Jordan, A.M. 6052.
 Jordan, T.W. 5787.
 Jorge de Moraes, H. 7001.
 Jorgensen, C.D. 2282, 5915, 8215.
 Jorvall, H. 3334.
 Jorwani, M.G. 4566.
 Joseph, A.N.T. 4001, 7179, 7184.
 Joseph, M. 8830.
 Joseph, S.A. 8427.
 Joseph, S.A. 9216.
 Josephson, R.K. 264, 2530, 6521.
 Joshi, B.G. 1439, 6214.
 Joshi, K.C. 2040.
 Joshi, K.C. 1449, 6768.
 Joshi, R.C. 1449, 3593.
 Jorwani, M.G. 3003, 4564, 4569, 4570, 5358, 5396, 5408, 7483, 7719, 7740, 7751, 7758, 7777, 7784.
 Journal, A.P. 2045.
 Jovenaz, D.P. 27.
 Jovanovic, Z. 1413.
 Jover, E. 8175.
 Joy, P.J. 4073.
 Joy, S. 4442, 5249.
 Joy, V.C. 4442, 5259.
 Jozsef, K. 3656.
 Ju-Peng, L. 2474.
 Juarez, E. 9082.
 Juarez, H.A. 8520.
 Juarez, P. 102.
 Juherthe-Jupeau, L. 329.
 Juchault, P. 6643.
 Judd, B.D. 1017.
 Judd, B.H. 1505.
 Judd, G.J.R. 515, 5311.
 Judd, J. 3019.
 Judd, W.W. 6794, 6796.
 Julian, G. 5173.
 Juliano, S.A. 8320.
 Julien, M.H. 5205, 6078.
 Julien, J.L. 8997.
 Junner, D.B. 636.
 Jursakov, N. 9397.
 Junreits, A.M. 201, 4152.
 Junquera, P. 334.
 Jupp, P.G. 1380.
 Jurado, F.W. 7055.
 Jurberg, J. 4938, 5089, 5536.
 Jurd, L. 8497.
 Jursanka, R. 3307, 4264.
 Jurzitza, G. 3260, 6452.
 Juska, A. 3044.
 Jute, N. 4502.
 Jutsum, A.R. 2981, 8062.
 Kaaya, G.P. 3308, 8162.
 Kabayo, J.P. 61.
 Kachroo, P. 7009.
 Kaczmarek, K. 9476.
 Kadarsan, S. 5933.
 Kaddu, J.B. 3567, 8157.
 Kadri, Z. 4247.
 Kadono, F. 3170.
 Kaeding, E.A. 1558.
 Kaemper, U. 2011.
 Kaemper, G. 4972.
 Kaethler, F. 8501.
 Kaitos, F.C. 1491, 1492, 3884, 5825, 6247, 6249, 6254, 8630.
 Kafatos, F.S. 4666.
 Kafanoglou, O. 8259.
 Kagawa, T. 5042.
 Kaguni, L.S. 7831.
 Kahn, A. 9399.
 Kai, H. 2678.
 Kadanov, L.Z. 5483.
 Kailey, J.S. 6641.
 Kain, W.M. 540, 2255, 6799.
 Kainhof, V. 7482, 7485.
 Kaiser, H. 8617.
 Kaji, S. 3292.
 Kajihara, H. 7778.
 Kakar, K.L. 5297.
 Kakpakov, V.T. 2320.
 Kalalova, S. 1404.
 Kaldy, M.S. 6970.
 Kalberdo, T.A. 9405.
 Kalmo, K. 3691.
 Kalinovic, I. 3938, 4436.
 Kaliszwski, M. 79.
 Kalkandelen, A. 4735, 4737.
 Kalkstein, L.S. 2961.
 Kallapur, V.L. 5709, 8105.
 Kallmeyer, K. 4970.
 Kalmukova, N.P. 9232.
 Kalode, M.B. 5404, 5407, 9136.
 Kalshoven, L.G.E. 5543.
 Kalu, P.S. 6641.
 Kalu, S.S. 878.
 Kalthoff, K. 1085.
 Kalushkov, P. 9078.
 Karsai, J. 4512.
 Kambdin, V.E. 589.
 Kambyssilis, M.P. 5830.
 Kamei, M. 7398.
 Kamel, M.Y. 5829.
 Kamenov, H.N. 165.
 Kameswara Rao, P. 2040.
 Kamm, J.A. 2226, 5701, 5901, 6144.
 Kammer, A.E. 4116.
 Kamra, O.P. 300.
 Kanagaratnam, P. 1811, 4623.
 Kanauya, K.R. 5135.
 Kanbe, M. 7478.
 Kaneko, Y. 2088.
 Kaneda, C. 8462.
 Kanehisa, K. 199, 3482.
 Kaneshiro, K.Y. 9067.
 Kang, S.H. 3499.
 Kankel, D.R. 1093.
 Kanno, H. 2729, 2743, 3531.
 Kanno, K. 2992, 5334.
 Kano, R. 4835, 4841, 5061.
 Kansal, Y. 2322.
 Kanwar, U. 8981.
 Kao, H.-L. 8504.
 Kapanadze, E.I. 9434.
 Kapatos, E. 5621.
 Kaplan, W.D. 5450.
 Kapoor, K.N. 6624, 6674.
 Kapur, R.V. 8286.
 Karakin, I.I. 3880.
 Karban, R. 2154, 5983, 6126, 6161.
 Karb, F. 882.
 Kardali, J.T. 2481.
 Kareiva, P. 6829.
 Kares, R.E. 9414.
 Karge, R.L. 4170.
 Karliouk, S.T. 5721.
 Karlskyl, J. 3521.
 Karlsson, J. 3467, 4469.
 Karpen, G.H. 335.
 Karpenko, C.P. 3501, 8213.
 Karpov, C.J. 8866.
 Karpov, V.L. 6245.
 Karpunina, N.N. 6590.
 Karsavoun, Y. 9976.
 Karsholt, O. 4887, 5105.
 Kartev, V.M. 6695.
 Karulin, B.E. 6469.
 Karvonen, J. 4114.
 Kasal, P. 8737.
 Kasei, M. 6055.
 Kasim, G.V. 9220, 9267, 9436.
 Kashi, K.P. 1050, 1051, 1403.
 Kashmery, A.M.S. 169.
 Kassem, Sh. M.I. 1832.
 Katsberger, G.D. 5861.
 Kaster, L.V. 8574.
 Kastern, W.H. 3887.
 Kasun Bai, A.R. 1745.
 Kasuya, E. 2269, 2270.
 Kaszab, Z. 3183, 7949.
 Katagiri, K. 8130.
 Katase, H. 7307.
 Katsuy, J. 7694.
 Kato, M. 2767.
 Kato, Y. 1910, 3472.
 Katoulas, M. 6074.
 Katsoris, P.P. 933.
 Katsouranos, B.I. 7252, 8960.
 Katsu, Y. 1910.
 Katsumi, M. 3300.
 Katsuno, S. 1087.
 Katula, K. 3885.
 Katz, S.J. 1559.
 Kaufman, S.A. 344, 1528.
 Kaufman, B.Z. 8923.
 Kaufman, S.E. 231.
 Kaufman, T.C. 3066, 9418.
 Kaufman, W.R. 231.
 Kaul, D. 2431.
 Kaul, H.N. 4202, 5728.
 Kaur, N. 7256.
 Kaur, H. 1501.
 Kaur, P. 1931, 4373, 5177, 5184, 5185, 5889.
 Kaur, S. 5014.
 Kauvar, M.L. 9415.
 Kavadia, V.S. 7747.
 Kavanagh, E.J. 937.
 Kavanagh, D.H. 4389.
 Kawabe, M. 6268.
 Kawabe, S. 1699.
 Kawachi, K. 8445.
 Kawahara, S. 2659, 5042.
 Kawai, S. 2800.
 Kawai, T. 2678.
 Kawakami, K. 8130.
 Kawakami, M. 2306.
 Kawakubo, M. 2596.
 Kawamote, F. 8178, 8185.
 Kawamura, N. 1520, 3088.
 Kawanishi, C.Y. 7373.
 Kawanishi, M. 3109, 6296.
 Kawardani, M. 1773.
 Kawase, S. 284, 1821, 3398, 3418, 5033.
 Kawata, Y. 4177, 4686.
 Kawato, M. 1741.
 Kawatra, V.K. 1835, 1886.
 Kawazu, K. 6621.
 Kay, A.B. 1370, 9254.
 Kay, B.H. 7632.
 Kay, D.J. 2840.
 Kay, I.R. 1124.
 Kay, S.H. 303.
 Kaya, H. 3406.
 Kaya, H.K. 287, 1213, 1804, 2953, 6160.
 Kaya, N. 4100.
 Kayahara, H. 2581.
 Kayash, S.A. 3699.
 Kayser, H. 172.
 Kazano, H. 4219.
 Kazmierki, A. 5.
 Kearney, J.N. 9072.
 Keaster, A.J. 8028, 8574, 9202.
 Kewajian, R. 6238.
 Keeler, K.H. 6987.
 Keeley, L.L. 1774, 5818, 6680.
 Keeping, M.G. 8117.
 Keerat-Kasikorn, M. 695.
 Keerthisinghe, C.I. 6110.
 Kefalakiou-Bourdopoulou, M. 2579.
 Kegasawa, K. 2227.
 Kehat, M. 2078, 2598, 6183, 6575.
 Keiding, J. 3124.
 Keil, B. 8087.
 Keil, C.B. 2619.
 Keiras, J.E. 12, 3974.
 Keizlarova-Lepesant, J. 7823.
 Kelada, N.L. 360, 3588.
 Kellen, W.R. 267, 501, 5759.
 Kelman, S. 6609.
 Kelley, R.W. 850, 5651.
 Kelly, B.A. 5003.
 Kelly, D. 6788.
 Kelly, D.C. 1034, 2617, 4618.
 Kelly, T.J. 1756, 2582, 5786.
 Kelman, A. 712, 8493.
 Kelsey, P.L. 5650, 7973.
 Kelton, L.A. 3151, 4007, 4741.
 Kemeny, M. 9254.
 Kemp, D.H. 2912, 2917, 5272.
 Kemphues, K.J. 3066.
 Kempton, D.P.H. 3017.
 Keng, G.J. 8274.
 Kence, A. 5059.
 Kendall, D.M. 2791, 4593.
 Kendall, R.O. 7508.
 Kendall, W.M.A. 6902.
 Kennedy, B.H. 2017.
 Kennedy, C.E. 177, 6842.
 Kennedy, G.G. 596, 3819, 8400, 9340.
 Kennedy, J.S. 1122.
 Kennedy, M.K. 416.
 Kennedy, P.M. 647.
 Kennell, D.R. 1452.
 Kenney, J.S. 184.
 Kennison, J.A. 3063, 3089.
 Keoniger, N. 4380.
 Kerby, R.L. 6274.
 Kerdpibule, V. 4499, 5770.
 Keren, S. 6615.
 Kerfoot, W.C. 6228.
 Kertész, E.E. 9398.
 Kerwiel, J.D. 5321.
 Kerr, J.D. 3448.
 Kerr, W.E. 1543, 3948, 4410, 5009, 5495, 7527.
 Kernich, G.J. 4025.
 Kerndge, S. 6272.
 Kersters, K. 8130.
 Kettle, D.S. 815.
 Kevan, P.G. 2791, 5906.
 Key, G.F. 1319.
 Key, K.H.L. 2473.
 Keady, F.J. 6558.
 Kfir, P. 1935, 4373, 5177, 5184, 5185, 5889.
 Khaue, V.A. 5806.
 Khauretdin, D.G. 9241.
 Khalaf, T.I. 1187, 2027, 3579, 8311.
 Khalafallah, M. 997.
 Khalequzaman, M. 1246, 1247.
 Chatham, B.P.S. 2661.
 Khamsulilina, N.M. 6542.
 Khan, A.G. 9157.
 Khan, B.A. 8894.
 Khan, F.U. 2937.
 Khan, I. 2554.
 Khan, M.A. 99, 711, 1359, 8106, 9337.
 Khan, M.H. 1181, 6072, 7548.
 Khan, M.W.Y. 2734.
 Khan, N.H. 7340.
 Khanna, R. 292.
 Khanna, S.C. 7403.
 Khannavikar, V. 7791.
 Khare, B.P. 6931.
 Khasmuddin, S. 577, 580.
 Khmurovsky, V.P. 2978.
 Khomontovsky, P.A. 7084.
 Khormramshahi, A. 1779, 1931.
 Khoul, S.P. 6011.
 Khurana, D. 5331, 5371, 5372, 5373, 5398.
 Khurana, S.M.P. 7253.
 Khush, G.S. 9280.
 Kiammer, A.E. 8910.
 Kiata, B. 1521, 7930.
 Kiata, M.A. 1521.
 Kidd, N.A.C. 8293.
 Kido, K. 9746.
 Kidwell, M.G. 3121.
 Kiefer, M. 460.
 Kienon, J.P. 4549.
 Kienon, J.P. 4550.
 Kienou, J.P. 9185.
 Kieren, J. 3746.
 Kierulff, M. 7500.
 Kirych, E. 787.
 Kiger, J.A. Jr. 3912.
 Kiguchi, K. 2722, 2726.
 Kikukawa, T. 3538.
 Kikuta, S. 4236.
 Kilani, M. 4599.
 Kile, B.W. 1150.
 Kilgore, R.L. 4506, 4524, 9268.
 Kilian, G. 6281.
 Kils, D. 320.
 Killick-Kendall, R. 2914.
 Kilpatrick, A.T. 2914.
 Kim, C.H. 4438, 4448.
 Kim, K.C. 8669, 8745.
 Kim, K.S. 1824.
 Kimball, R.A. 2954.
 Kimbrough, J.W. 4193, 4199, 9005.
 Kimura, K. 8435.
 Kimsey, L.S. 2374, 5238, 6431, 6441, 6982, 7112, 9087.
 Kimsey, R.B. 6431, 6982.
 Kimura, I. 7376, 8149.
 Kimura, M.T. 4463.
 Kimura, S. 2726, 7282.
 Kimura, T. 7439.
 Kinbacher, E.J. 8867.
 Kintler, S.D. 726, 727, 8867.
 King, C.J. 5704.
 King, C.M. 8332.
 King, D.R. 3584.
 King, J.S. 735, 2957, 2979, 3243, 5941.
 King, E.W. 1257.
 King, P.D. 369, 403, 487, 1300, 1301, 1302, 6911, 9289.
 King, P.E. 5230.
 King, R.C. 3093.
 King, R.D. 6225.
 King, T.J. 569.
 Kingan, T.G. 2588.
 Kingsley, P.C. 1865, 5816.
 Kingsolver, J.G. 6582.
 Kingsolver, J.M. 3162, 3186, 7162, 7954.
 Kinn, D.N. 500, 4430.
 Kinnear, J.F. 5003.
 Kino, H. 3561.
 Kinomura, K. 2276, 7000, 7357.
 Kinser, D.E. 7265.
 Kinsey, M.G. 6096.
 Kipp, L.R. 9083.
 Kira, M.T. 6806, 8471.
 Kirby, R.D. 2196, 3814.
 Kirchner, H.W. 4389.
 Kirchhoff, C. 824.
 Kirchner, R.F. 1674, 4906, 6457.
 Kirschoff, G.S. 4039.
 Kistani, K. 2659, 5042, 9275.
 Kirk, A.A. 1896.
 Kirk, V.M. 6086, 6966.
 Kirkbride, D.M. 6442.
 Kirkland, R.L. 5211, 6151, 6485, 9171.
 Kirkpatrick, R.L. 8545.
 Kirkwood, A.C. 646.
 Kirschenhofer, E. 3984.
 Kirschfeld, K. 4133, 4968.
 Kirschvink, J.L. 3302.
 Kiron, I. 2077.
 Kurui, R. 1466.
 Kiselev, F.L. 9379.
 Kisha, J.S.A. 3705, 8485.

Author Index

- Kishino, K.-I. 3004.
Kishore, P. 5408, 7670.
Kishore, R. 7746.
Kismoto, R. 2340.
Kislev, N. 5758.
Kismir, A. 4250.
Kiss, I. 8631.
Kistler, R.T.A. 8224.
Kistner, D.H. 5558, 6365.
Kiu, H. 1215.
Kitabatake, S. 2767.
Kitahara, T. 5795.
Kitano, H. 2740, 8325.
Kitachi, Y. 2227.
Kitayama, C.Y. 2288, 2732.
Kitazawa, K. 2550.
Kitching, R.L. 1193, 7581, 7610.
Kittle, P.D. 5578.
Kittcock, D.L. 3021, 3765.
Kiziroglu, I. 619.
Klag, J. 7428.
Klaman, A. 3320.
Klassen, W. 1100.
Klausner, E. 6291.
Klausnitzer, B. 3978.
Klayman, E. 2483.
Kleiman, R. 2252.
Klein, B.G. 5126, 6223.
Klein, H. 248.
Klein, M. 5346, 6615, 8467.
Klein, M.G. 1930, 8499.
Klein, U.A. 5749.
Klein, U. 3294, 8055.
Kleine-Schonefeld, H. 2708.
Klewin, W. 3265.
Klempner, A. 8081.
Klempner, H.G. 3533, 4292, 6661.
Klimaszewski, J. 3181, 4111, 4742.
Klimaszewski, S.M. 8945.
Klimaszewski, S.M. 1464.
Kline, D.L. 4419.
Klink, A. 8791.
Klocke, J.A. 4274, 9333.
Kloepfer, J.W. 3424.
Kloetzl, P.M. 2333.
Kloppen, J.S.H. 796.
Klosterhaus, A.J. 8178, 8185.
Klots, A.B. 6329.
Klowden, M.J. 1358, 2807, 5875.
Klug, R. 8416.
Klun, J.A. 1788, 2187, 3750.
Klopp, N.Y. 7190.
Knap, A.G.A.C. 7043.
Knapp, W.F. 1232, 5345.
Knibb, W.R. 3113, 6283.
Knight, J.W. 855.
Knight, M.M. 673.
Knight, W.E. 8524.
Knisley, C.B. 5888.
Knoop, W.E. 1845.
Knop, N.F. 5807.
Knowles, C.O. 1390, 3333, 4232.
Knoth, A.D. 2684.
Knott-Davies, P.S. 7648.
Knudson, E.C. 7992.
Knuell, W. 7693.
Knust, E. 2333.
Knutsen, A.E. 9102.
Kobayashi, M. 284, 1821, 3398, 3418, 5033, 7797.
Kobayashi, R. 8109.
Kobayashi, R.M. 6136.
Kobayashi, Y. 330, 4248, 7254.
Koburova, K. 8181.
Kocak, K.M. 6598, 8137.
Kocagözü, D.F. 5323, 7923.
Koch, F. 6645.
Koch, H.G. 1129, 1860, 3246, 4514, 8256.
Kochansky, J. 987.
Kocher, M.M. 9231.
Kochetova, G.A. 9227.
Kocher, S.C. 2062, 6195.
Koehler, G. 7624.
Koehler, M.M.D. 3336.
Koer, T.B. 6097.
Koer, J. 1771, 6657.
Koer, E. 701.
Koerner, G. 4293, 4380, 8267.
Koerner, N. 8267.
Koensig, D. 4721.
Koeppe, J.K. 8933.
Koerber, T.W. 4585, 8584.
Koga, D. 96.
Kogut, M. 535, 705, 811, 9277.
Kohn, M. 7247.
Kohn, B. 8024.
Kok, D.J. 5282, 5284.
Kok, L.T. 1200, 1695, 1938, 4329, 5937.
Kokwaro, E.D. 235, 325, 358, 3455, 4105, 4131, 5918, 8163.
Kolbe, E. 1833.
Kollbornsen, P.H. 937.
Kolebnova, M. 798.
Kolesnikov, N.N. 3880.
Koller-Wiesinger, M. 338.
Koller, C.N. 7260.
Koller, T. 8621.
Kolodny-Hirsch, D.M. 4611, 8536.
Kolomon, G.V. 9189.
Kolunov, E.V. 8987.
Komarov, L. 2308.
Komarov, S.A. 7281.
Komatsu, A. 5670.
Komazaki, S. 7619.
Komatsu, A.A. 5908.
Komura, T. 2306.
Komura, M. 8020.
Konar, S.K. 9371.
Kondo, N. 2562.
Kondrasina, N.G. 9895, 9250.
Kondratieff, B.C. 1632, 1674, 3054, 4906, 6457.
Kondratieff, P.F. 7814.
Kong, K.L. 8920.
Konig, W.A. 248.
Konno, Y. 1912, 7341.
Kono, S. 1840.
Kono, Y. 7456.
Konstantinov, O.K. 9253.
Kontzios, A. 675.
Konzelmann, E. 14.
Koolman, J. 58, 6574.
Kooman, C. 7832.
Koonce, K.L. 1460.
Koopmanschap, A.B. 8106.
Kopelke, J.P. 6413.
Koponen, M. 5934, 7894.
Kopp, D.D. 3154.
Koppa, R. 7476.
Korenberg, D.L. 7257, 9252.
Korke, D.L. 4311.
Kormulev, N.A. 31, 5577, 6415, 7978, 8810.
Kornberg, T. 921, 1506, 1507.
Koronen, A.I. 9054.
Korochin, L.L. 8948.
Koroleva, E.V. 9474.
Korst, P.J.A.M. 6992.
Kortelios, M.J.H. 7039.
Korsyko, J. 7887.
Koshihara, T. 2227, 3346, 8964.
Koshie, V. 3699.
Koshiz, T. 2041, 7404.
Kosonocka, L. 8945.
Kosovskikh, V.I. 9012.
Kost, N.V. 8934.
Kostyukov, M.A. 9250.
Koszarab, M. 1638, 3216, 4422.
Kotbi, F.A. 6652.
Kotelnikova, V.V. 6542.
Kothari, S. 2569.
Kotova, G. 2996.
Kotzamp, W.B. 640, 744.
Kotzamp, M. 3361.
Koul, O. 6929.
Koutaloff, A. 8209.
Kovalenko, L.G. 8966.
Kovalev, B.G. 3347, 6577.
Kovalsky, Yu.V. 7257.
Kovalick, G.E. 8933.
Kova, K.M.A. 6946.
Kovats, J. 2705, 2745, 5012, 5850, 6087.
Koyama, K. 1204, 2485.
Kozanek, M. 778, 2418.
Kozar, F. 2500.
Kozlov, S.F. 4440, 6626.
Kozlov, N. 9144.
Kozuch, O. 4491.
Kozuka, Y. 5037.
Kraemer, M.A. 2586.
Kraemer, M.E. 3538.
Krah, S.K. 5956.
Krawakowski, A. 3659.
Kraus, F. 3289.
Krambras, A. 675.
Kramer, J.P. 5036, 6426.
Kramer, K.J. 96, 2258, 2576, 5685, 6103, 6519, 7049, 9331.
Kramer, R.D. 504.
Kramer, S.J. 5714.
Kramer, W.L. 5859.
Kramers, P.G.N. 7043.
Kramm, K.R. 8150, 8153.
Kramm, V. 548.
Krampritz, H.E. 4183.
Krampritz, F. 7104, 9481.
Krasnoborzhny, N.Ya. 8966.
Kratz, F. 1289.
Krause, C.R. 2508.
Krause, M. 7861.
Krauthamer, V. 346.
Krauchenko, V.D. 6693, 7521.
Krayev, A.S. 9382.
Krczal, H. 274.
Kreck, J. 6647.
Krenil, G. 3431.
Kremer, G. 2074.
Krell, P.J. 8122.
Kremer, G. 8864.
Kremer, M. 1355, 8797, 9480.
Kremsinger, R.H. 3335.
Krieg, A. 7379.
Kriegel, M. 1355.
Kriegel, Y. 6607.
Krikken, J. 807, 8751.
Krimbas, C.B. 1497, 3921, 7866.
Kring, T.J. 8006.
Krinisky, W.L. 8428, 8696.
Kris, S.S. 7480.
Krishna Murthy Rao, B.H. 2040.
Krishna, S.S. 2972, 4244.
Krishnaiah, K. 1836.
Krishnakumar, N.K. 4529.
Krishnamoorthy, R.V. 5248, 9129.
Krishnamurthy Rao, B.H. 7452, 7467, 7771.
Krishnamurthy, A. 4529.
Krishnamurthy, B.S. 6287.
Krishnamurthy, N.B. 7174.
Krispny, J.W. 3790.
Krispansky, K. 786.
Krisofsky, J. 7903.
Kritsky, G. 2433.
Krivoshina, N. 6396.
Krivoshina, N.P. 27.
Kro, I. 777.
Krochmal, A. 2928.
Krochmal, C. 2928.
Kroese, H. 1363.
Krogsgaard-Larsen, P. 127.
Kroha, M. 4094, 5734, 5735, 5984.
Kroha, M.J. 5755.
Kropinski, A.M. 4198, 5738.
Krosh, D.A. 572.
Krosh, L. 1330.
Kruger, H. 2177.
Kruppal, M. 7599.
Krug, G. 9388.
Krypin, A.Yu. 9198.
Krysan, J.L. 1689, 8221.
Kryshanskiy, O.L. 75.
Krzysztofak, L. 8678.
Kszarek, T.G. 1378.
Kszarekiewicz, M. 4947.
Kubeki, M. 2789.
Kubista, V. 958.
Kubli, E. 1496, 2303, 2304.
Kubo, I. 2556, 2842, 4274, 9333.
Kubota, T. 2556.
Kuboki, M. 5144.
Kubota, A. 218.
Kucera, M. 2573, 4245.
Kuchinski, M. 8458.
Kudamatsu, T. 3439.
Kudson, L.H. 4912, 8719.
Kudryashova, N.I. 7146.
Kudryavtseva, N.M. 6639.
Kulshrester, J. 5657.
Kuehbandner, M. 3985.
Kuehbandner, F. 3624.
Kuehlforn, V.F. 324.
Kuehne, R. 3298, 7293.
Kuenast, C. 311, 632.
Kuenast, V.C. 743.
Kuenen, L.P. 2763.
Kuenen, L.P.S. 2240, 4913, 5843.
Kugler, J. 8831.
Kuhlhorn, F. 638.
Kuhn, D.T. 392, 955.
Kuhn, H.G. 673.
Kuhn, H.J. 1733.
Kuhne, H. 858.
Kukoz, F. 3809.
Kukoz, J.J. 1757.
Kulk, L.L. 6469.
Kulincevic, J.M. 3754, 8208.
Kulkova, T.A. 9022, 9056.
Kulman, H.M. 3495, 7785.
Kulshreshtha, V. 2527.
Kulter, H. 1345.
Kumada, N. 1161.
Kumakura, M. 2992, 5334.
Kumar Sharma, V. 5406.
Kumar, A. 8689.
Kumar, D. 3072.
Kumar, M. 4678.
Kumar, N. 3323.
Kumar, P. 8930.
Kumar, R. 3782.
Kumar, S. 3329.
Kumar, V. 6620.
Kumaran, A.K. 1858.
Kumau, T. 719.
Kundu, R.K. 2994, 2995, 2999.
Kundu, G. 7670.
Kundu, T.K. 5025, 7383.
Kunnu, Y. 2858.
Kunkel, J.G. 5073.
Kuno, G. 7388.
Kuntz, K.J. 6074.
Kunziba, R.W. 388.
Kunz, S.E. 1128, 2172, 3497.
Kunz, W. 4664.
Kuo-Fan, T. 2386.
Kuo, H.-L. 5678.
Kuo, C.-L. 2443.
Kuo, C.L. 4018.
Kupresova, V.B. 6702.
Kupryashova, E.S. 9246.
Kuramochi, K. 5676.
Kurezwski, F.E. 5845.
Kurezwski, F. 438, 1948, 3623, 5854, 5991, 8071.
Kurek, V.B. 9227.
Kurbayashi, S. 2663, 9313.
Kunhara, Y. 9067.
Kunhara, Y. 1849.
Kunhara, Y. 2550.
Kurik, G. 8600.
Kurik, A. 9156.
Kurk, S.P. 2321, 7842.
Kuroiwa, A. 8088.
Kuroko, H. 2092.
Kurta, A. 7550.
Kurth, B.H. 1177.
Kuruk, D.C. 869.
Kurtti, T.J. 3415, 4115.
Kurup, N.C. 5090.
Kurup, N.K. 2683.
Kuruvilla, S. 1001.
Kusanagi, A. 1546.
Kushalappa, K.A. 5374.
Kushnarev, E.I. 9189.
Kushwaha, K.S. 5401.
Kuster, J.E. 251, 964, 2536, 4130.
Kusum, T. 1215.
Kutsch, W. 2522.
Kutter, H. 7091.
Kuwahara, M. 3449, 7407.
Kuwahara, Y. 7339, 7342, 8974.
Kuwano, E. 3428.
Kuzoe, F.A.S. 2936.
Kvamme, T. 422.
Kvenberg, J.E. 7375.
Kwock, R.A. 501.
Kwolek, W.F. 4625, 5312, 6204.
Kwong, 6899, 9272.
Kyriak, J. 4114, 7222.
La Grenade L. 6061.
La Jove, R.S. 431.
La Patézou, A. 8066.
Laarman, J.J. 9015.
Labanowski, G.S. 9004.
Laberge, W.E. 245.
Labeyrie, V. 8707.
Labhart, T. 144.
Labrousse, M. 3439.
Lacey, L.A. 640, 1364.
Lachaise D. 1552, 1628, 5064.
LaChance, L.E. 3501.
Lachapelle, J.M. 3671.
Lack, A.J. 6802, 6803.
Lack, R.J. 7552.
Lackett, J.C.M. 6664.
Lackie, A.M. 1010, 6604.
Lackner, B. 376.
Lacy, G.H. 3836.
Ladd, T.L.Jr. 1930, 8499.
Ladde, M. 1009, 1809, 7012.
Laere, O.V. 1024.
Lafont-Cazal, M. 2524.
Lafontaine, D. 4739, 7996.
7998, 8839.
Lagado, O.I. 7010.
Lago, P.K. 2366, 7018, 8693, 8694, 8695.
Lagowska, B. 9139.
Lagueux, M. 3345, 3515.
Lahargue, J. 3267.
Lahmann, E.J. 5905.
Lai-Fook, J. 9038, 9040, 9041, 9004, 9065.
Laidlaw, H.H. Jr. 1415.
Laidlaw, H.H. Jr. 5410, 8461, 8659.
Laird, D.J. 9121.
Laine, J.A. 6190, 6021, 8440.
Laird, M. 7630, 9196.
Laitinen, T. 2220, 5299.
Lake, D.J. 1131, 2903.
Lake, R.W. 6618.
Laker, M.C. 6825.
Lakhous, S.C. 2310, 4677, 4678.
Lakomek, H.J. 3073.
Lal, H. 7680, 7372.
Lal, L. 4552.
Lal, P. 7720.
Lal, R. 2653, 7417, 7736, 7795.
Lal, S.S. 4620.
Lalanne-Cassou, B. 228.
Lalitha, C.M. 2041.
Lal, A.B. 132, 2540.
Lal, B.S. 7678, 7707, 7710.
Lalonde, R.G. 8354.
Lam, J. 295, 317.
Lam, J.J.R. 730.
Lam, W.K. 9261.
Lamas, G. 7925.
Lamb, C. 988.
Lamb, D.S. 4218.
Lamb, R.C. 3720.
Lamb, R.J. 2687, 8534.
Lambia, L. 8390.
Lambdin, P.L. 1426, 3216, 5639, 6166.
Lambert, B. 8310.
Lambert, D.M. 5566, 7490.
Lambert, J.J. 1731.
Lambert, L. 9352.
Lambert, M.R.K. 1171, 1465.
Lambertsson, A. 8641.
Lambrecht, F.L. 1337.
Lamma, J. 311.
Lamp, W.O. 3052, 5198, 5884, 9105, 9163.
Lampert, E.P. 6094.
Lamy, M. 1059, 3694, 6515.
Lancaster, J.L. Jr. 2173, 4506.
Lance, R.S. 1321, 1584, 3534, 5146.
Lance, D. 8507, 9076, 9357.
Landrum, P.F. 7813.
Landureau, J.C. 877.
Landwehr, V.R. 8283.
Lane, N.J. 902.
Lane, R.P. 2506, 5573.
Lang, R.J. 1321, 1584, 3534, 5146.
Lang, H.H. 414.
Lang, J.H. 3796.
Lange, A.B. 2715, 3459, 8849, 9059.
Langham-Safer, P.R. 8632.
Langham, M.R. 1351.
Langley, C.E. 2926.
Langley, C.H. 9425.
Langley, P.A. 61, 1751, 5268, 5841, 6984, 8089, 8254, 8260.
Langmaid, J.R. 9446.
Langor, D.W. 8700.
Langridge, D.F. 550, 370.
Langridge, W.H. 4204.
Langridge, W.H.R. 1036, 1091, 1304, 1392.
Langston, R.L. 7118.
Lanham, U.N. 107, 7063.
Laner, G.N. 1596, 4526.
Lansios, V. 9111.
Lansios, B. 3514.
Lapchin, L. 6466.
Lapierre, R. 1363.
LaPlante Reese, S.C. 525.
LaPlante, R.F. 3776, 6163, 6165.
Lara, F.M. 6080, 6127, 6153, 6834.
Larsen, C.M. 9552.
Larget, I. 2218, 2639.
Laroca, S. 6750.
Larochelle, A. 9496.
Larriere, D.C. 1740.
Larrouque, M.-M. 6474.
Larrouque, M.M. 2545.
Larsen, K. 5515.
Larsen, L.N. 6541.
Larsen, O.N. 4976, 4977.
Larsen, T.B. 4437, 5215, 7108, 7222.
Larson, A.D. 607.
Larson, D.J. 1007.
Larson, D.J. 1067.
LaSalle, J. 2450.
Lassam, O.D. 513.
Lasebian, B.A. 8378.
Lashomb, J. 1229.
Lashomb, J.H. 9140.
Laska, P. 9291.
Lashlaw, R.H. Jr. 5410, 8461, 8659.
Lash, H.R. 2798.
Laster, M.L. 1012, 3012, 6168.
Lastovka, P. 6409.
Lastra, R. 7660.
Latge, P.J. 2622.
Latter, B.D.H. 2349.
Latter, G. 5044.
Lau, P.H. 5774.
Lau, R.J. 220.
Lauenroth, W.K. 2990.
Lau, M.D. 1322.
Laufer, H. 920.
Lauga-Reyrel, F. 4281.
Lauga, J. 465, 2541, 4261.
Lauga, G. 493, 1245, 5064.
Laughlin, S.B. 4969.
Laumond, C. 6613.
Launhaugh, J.L. 3688.

- Launois Luong, M.H. 681
 Launois, M. 681
 Laune-Ahlberg, C.C. 2519
 Lauener, P. 3213
 Lavapert, S. 1059
 Lavalard, R. 4151
 Lavessiere, C. 4074, 4549,
 4550, 9185, 9240, 9251, 9264
 Lavenseau, L. 3267
 Lavette, A. 5176
 Lave, B. 1561, 1980
 Lavigne, R.J. 2421, 8250
 Laville, E. 1454
 Laville, H. 819
 Lavopierre, M.M. 1363
 Lavopierre, M.M.J. 4494
 Law, J.H. 6558
 Lawler, K.A. 3414
 Lawrence, G.B. 8601
 Lawrence, J.F. 2501, 9271
 Lawrence, P.A. 142, 339, 757,
 1523, 5814, 8897, 8901
 Lawrence, P.O. 85, 2028, 9135
 Lawrence, W.S. 8816
 Lawrie, D.E. 4585, 8584
 Laws, J.H. 6562
 Lawson, D.L. 1757
 Lawson, M.A. 6887
 Lawton, J. 6789
 Lawton, J.H. 593, 9187
 Lazarovici, P. 8182
 Lazarovici, P. 8182
 Lazarus, N.R. 7290
 Lazarus, R. 963
 Lazdunski, M. 5055
 Lazelli, M. 3686
 Le Bras, S. 1753
 Le Carif, B. 6632
 Le Lay, G. 4188
 Le Mao, J. 1368
 Le Moh, F. 3849, 5159
 Le Pont, F. 9237
 Le Ret, M. 1236
 Le Seesch, A.M. 5121, 6688
 Leach, A.O. 3491, 5083, 5088
 Leach, C.E. 2516
 Leader, H. 5775
 Leachy, M.G. 6686
 Learned, L.W. 2927
 Leatch, G. 2944
 Leath, S.R. 2681, 2682, 2838,
 5225, 5226, 5919
 Lebedeva, K.V. 3347
 Lebednets, N.N. 8992
 Lebrun, D. 4280
 Lebrun, P. 5984
 Lebrun, R. 1014
 Leclard, M.M. 7369
 Leclair, R. Jr. 1203
 Leclercq, M. 6323, 9485
 Leccoq, M. 681
 Leclercq, C. 6824
 Leclercq, A. 8087
 Leclercq, S. 318
 Leclercq, R.C. 6725, 6846, 7491
 Ledig, E.Th. 1393
 LeDuc, J.W. 625, 1379
 Ledvinka, J. 6894
 Lee, G.F. 6339, 6344
 Lee, C.S. 4665
 Lee, G. 2042
 Lee, H.P. 1897
 Lee, M.B. 2897, 5997
 Lee, M.A. 5202
 Lee, P.C. 8573
 Lee, R.E. Jr. 1189, 2603, 4144,
 6778, 8107
 Lee, R.F. 6174
 Lee, R.M.K.W. 922
 Lee, S.-F. 5714
 Lee, S.S. 1115, 5767
 Lee, T.H. 9254
 Leegwater-Van Der Linden, M.E. 7423
 Leeper, J.R. 8200
 Leereveld, H. 2061
 Lees, A.D. 2533, 2699
 Lees, E. 5074
 Leesch, J.G. 8335
 Leetham, J.W. 2940
 Lefevre, G. 6267
 Lefevre, V.F. 7927
 Lefkovich, L.P. 68, 8660
 Legay, J.-M. 2675
 Legendre, R. 258
 Leger, N. 8882
 Legg, G. 7156
 Leggett, J.E. 7156, 702, 703, 6194
 Leggieri, P. 5451
 Legner, E.F. 1463, 2896, 5944, 9322
 Legrand, J. 7999
 Legrand, J.J. 6643
 Lehane, M.J. 1263
 Lehman, I.R. 8626, 9066
 Lehmkuhl, D.C. 7266
 Lehmkuhl, D.M. 8004
 Lehti, J.P. 2682, 5225
 Lehtinen, P.T. 4767, 8052
 Leibee, G.L. 1277
 Leibold, C.M. 697
 Leiby, K.R. 8935
 Lcidy, R.B. 5416
 Leigh, B. 2312, 2331, 7038
 Leigh, T.F. 1903, 5629, 8526
 Leizpert, S.L. 8664
 Leitch, B.L. 2181
 Leitch, B.L. 8133
 Leitch, A.M. 8508
 LeMaire, C. 6446
 Lemire, J.M. 8746
 Lemmeunier, F. 1552
 Lemly, A.D. 7815
 Lenai, D.R. 2293
 Leng, H.F. 4230
 Lenoble, B.J. 3389
 Lenour, A. 4653, 5870
 Lenski, R.E. 8367
 Lensky, Y. 746, 4120, 5339
 Lent, H. 5536
 Lenting, B.P.M. 7303
 Lentz, G.L. 446, 1425
 Lenz, M. 6217, 6999, 9005
 Leon, H.A. 353
 Leon, J.A. 494
 Leonard, A.M.C. 4951
 Leopold, R.A. 5080
 Lepage, M.P. 2004, 2109
 Lepesant, J.-A. 7823
 Leppla, N.C. 1168
 Lepenne, D.J. 2802, 8424
 Lercker, G. 3390
 Leroux, J.M. 38
 Leroy, Y. 1164
 LeSage, L. 3856
 Lesemann, D.E. 3707
 Lesle, M.W. 2110
 Leslie, J. 661, 3742, 3758
 Lespinasse, R. 4696
 Lessmann, C.A. 2713, 4275, 5094
 Lester, D. 5054, 8182
 Lester, R. 1465, 3354
 Leuschner, K. 1416
 Leuschner, W.A. 683
 Leuthold, R.H. 2266
 Leskaya, V.F. 8858
 Lesanovska, I.M. 4936
 Lesasseur, L. 1603
 Levenbook, L. 7455
 Levesque, G.J. 7813
 Levesque, C.M. 5974
 Levi, H.W. 1718
 Levi, M.J. 8858
 Levin, D.B. 4190
 Levin, M.L. 7257
 Levine, A.S. 4302
 Levine, E. 611, 2244, 3244,
 6478, 6753, 8574
 Levine, M. 5482, 8632
 Levine, S. 4282
 Levine, L. 9395
 Levings, S.C. 4649
 Levinson, M. 5339
 Levinson, A.R. 1157
 Levinson, H.Z. 1157, 7663, 9165
 Levinson, S.O. 206, 281
 Levis, R. 1494, 1509, 7836
 Levo, Y. 3700
 Levski, S. 6615
 Levy, L.S. 1539, 6240
 Levy, R. 674, 6128, 6601, 8415
 Lewis, D. 4538
 Lewis, D.J. 2802, 3195, 8424
 Lewis, J.G.E. 4068
 Lewis, J.R. 3046
 Lewis, L.C. 3402, 5051, 5052,
 5779, 5780, 6008, 8168, 8443,
 8454, 8495
 Lewis, L.T. 8364
 Lewis, M. 8111
 Lewis, R.D. 916, 4984
 Lewis, R.E. 783
 Lewis, T. 3714
 Lewis, W.J. 423, 1453, 2023,
 3357, 5382
 Lewontin, R.C. 3127
 Lewy, A.M. 1662, 7221
 Leyk, G. 6694
 Lezzi, M. 7828, 8621
 Lhoste, J. 2599
 Li, D. 5289
 Li, G.-O. 8994, 9233
 Li, G.-X. 8151
 Li, G.-Y. 8166
 Li, J. 6614
 Li, J.-Q. 1778
 Li, J.-Y. 2895
 Li, P.-Y. 4590
 Li, P.-S. 57
 Li, S.-L. 4670
 Li, T.-G. 9234
 Li, W.G. 426
 Li, X.-D. 9226
 Li, X.-O. 8166
 Li, Y.-G. 4580
 Li, Y.-J. 2780
 Li, Y.-T. 1114
 Li, W.-Y. 4580
 Li, Z.-Y. 8151
 Li, Z.S. 57
 Liang, F.-P. 9226
 Liang, J.C. 9412
 Liat, L.B. 6063
 Lichtwardt, R.W. 2624, 2645
 Lidster, P.D. 1395
 Lieberman-Jaffe, S. 1272
 Liebold, A.M. 4751
 Liebisch, A. 9263
 Liehne, P.F.S. 3698
 Lieke, E. 137
 Lienhard, C. 8003
 Lienk, S.E. 8200
 Lienert, F. 6879
 Lightfoot, C.J. 633
 Lightstroom, G. 2018
 Light, E.B. 4625, 6899, 9272
 Lillie, T.H. 853, 2103, 5625
 Lilly, C.E. 5583, 3637
 Lim, D.K.B. 8412
 Lim, K.P. 9014
 Lim, S.-J. 5767
 Lim, T.W. 4502
 Lim, W.A. 6558
 Lima da Silva, M.J. 1540
 Lim, H.-P.P. 3893
 Lin, H.L. 2589
 Lin, J.H. 2780
 Lin, F.-F. 1384
 Lin, T.-F. 5381
 Linardi, P.M. 291, 5330
 Lincoln, D.T. 2912
 Lind, A. 5768
 Lindgren, J.E. 973
 Lindgren, J.A. 73
 Lindgren, D. 1726, 8573
 Lindgren, D.T. 537
 Lindgren, S. 5704
 Lindquist, A.R. 6633
 Lindquist, R.K. 309, 2205
 Lindquist, S. 5708, 8932
 Lindskog, P. 6414
 Lindstedt, D.L. 1903
 Linerich, K. 8641
 Limes, J. 5979
 Ling, E. 344
 Lingappa, S. 4420
 Lingren, P.D. 1394, 4374
 Linhart, A.X. 9259
 Linker, H.M. 6114
 Linn, C.E. Jr. 419, 1927
 Linnavuori, R. 828, 829
 Linsley, E.G. 6385
 Lintereur, G.J. 3595
 Linton, D.A. 6966
 Lint, B. 305, 8925
 Lioy, J. 283, 998, 2629
 Lipitz, R. 3659
 Lipke, H. 170, 302, 884, 8943
 Lipmann, F. 8085
 Littell, R.C. 4573
 Little, H.F. 8228
 Littrell, R.H. 8566
 Litvinova, N.F. 9198
 Liu, C.-Y. 43
 Liu, G. 5879
 Liu, H.J. 614, 8479
 Liu, M.-Y. 8304
 Liu, M.Y. 3443
 Liu, S.-K. 1013
 Liu, S.-S. 7349
 Liu, S.L. 4008
 Liu, T.P. 4110
 Liu, T.-T. 814
 Liu, W.-X. 8166
 Liu, Y.-Z. 2781
 Livingston, J.M. 2237
 Livshitz, I.Z. 6342, 6347
 Iiyagi, I. 5897
 Lizarbe, M.A. 940
 Liras, E. 4410, 4412
 Llewellyn, G.C. 4212, 5803
 Lloberas, J. 8196
 Lloyd, C.W. 8711
 Lloyd, D.L. 549
 Lloyd, E.P. 703, 2242
 Lloyd, E.J. 1152, 1303
 Lloyd, M. 2154, 2702, 6161
 Lo, C.W. 5100
 Locke, J. 6557
 Locke, M. 8937
 Lockett, T.J. 5681
 Lockey, K.H. 1730, 5687, 6565
 Lockshin, R.A. 2610, 7353
 Lodenus, M. 2620, 5129
 Lodholz, M.L. 3485, 5180
 Lodos, N. 4735, 4737, 4802
 Loch, M.J. 1744, 7437
 Loch, I. 5555
 Loebn, U. 2299
 Locvei, G.I. 9190
 Locytenyrum, K. 1596
 Loigren, C.S. 279, 669, 987,
 1754, 1942, 1993, 2192, 3437,
 5716, 6886, 7929
 Loftus, R. 4979
 Logoinova, E.D. 3557
 Logoinova, N.G. 159
 Lohr, A.R. 3058
 Lohr, W. 4284
 Lohse, G.A. 14
 Lok, C.K. 5766
 Lok, J.B. 2494, 3400
 Loken, A. 2847
 Lokman, M.D. 7690
 Lokman, V.I. 6477
 Lomas, M.B. 9037
 Lombard, P.B. 688
 Lomer, C.J. 4618
 Lomer, R.A. 8114
 Lomholdt, O. 7882
 Lomono, S. 4484
 Lomdi, J.G.H. 4832
 Long, C.E. 407
 Long, E.O. 3081
 Long, E.E. 1275, 2071
 Long, Y.-S. 7
 Long, R.W. 1279
 Longhurst, C. 3710
 Longo, S. 3722
 Longstaff, B.C. 1282, 5152,
 5333, 7662
 Longworth, J.F. 1822
 Lonsdale, D. 2125, 2964
 Lopyk, P. 2900, 3077, 3892
 Lopatin, N.V. 7690
 Loper, G.M. 5310, 8928
 Lopes, A.C. 6039
 Lopez-Abella, D. 3416
 Lopez-Fernandez, C. 3085, 3900
 Lopez, A. 329
 Lopez, J.D. Jr. 4383
 Lopez, P.F. 4221, 8667
 Lopez, T. 1755
 Lorber, B.E. 6850, 9466
 Lord, W.G. 3040, 5379
 Loredello, A.L. 6127
 Lorenz De Vries, N.E. 9168
 Lormer, N. 5643
 Loring, S.J. 4821
 Lono, P.J.A. Jr. 9329
 Lora, B. 3095, 8017
 Loschiavo, S.R. 2680
 Lossois, P. 741
 Lottspeich, F. 8925
 Lotz, B. 5719
 Lotze, B.D. 8649
 Louda, S.M. 6783
 Loughton, B.G. 174, 2515, 2715,
 5784
 Loukas, M. 1497, 3921, 7866
 Lounibos, L.P. 2868
 Lourenco, W. 6838
 Lourenco, W.R. 2392, 4769,
 4942, 5220
 Loutit, R. 9192
 Loutet, J.-P. 4247
 Louw, P. 669
 Lovell, K.L. 3548
 Lovell, V.M. 206, 5790
 Lovre, A. 3090
 Lowe, H.B. 2986, 3724
 Lowe, R.E. 387
 Lowry, R.C. Jr. 656, 3399, 4516
 Lowry, P.J. 7290
 Loyd, J.E. 394
 Loye, J.E. 9112
 Lozano, G. 188
 Lu, J.-L. 4230
 Lu, K.L. 6786
 Lu, P.W. 6519
 Lu, Z.F. 426
 Luard, E.J. 7573
 Lubgen, M.C. 478
 Lubben, N.H. 2304
 Lubzens, E. 395
 Lubzens, E.W. 1887
 Lucas, J.A. 8793
 Lucas, J.R. 1709, 6830
 Luchnikova, E. 5826
 Luck, R.F. 8559
 Luckins, A.G. 1340
 Lucuk, G.S. 2736
 Ludlow, A.R. 1122
 Ludvik, J. 8138
 Ludwig, H.W. 8669
 Ludwig, J.A. 604, 3653, 8374
 Luedke, A.J. 4510
 Luening, K.G. 3104, 3105, 3106,
 4679, 4680, 6257, 7032, 7843
 Luescher, M. 3339
 Luethy, P. 7365
 Luff, M.L. 2983, 6638, 8387
 Luhman, J.C. 1650
 Luik, A. 5750
 Luik, M.J. 663
 Lukash, M.M. 9232
 Luke, B.M. 9037
 Lukiyanchuk, M.P. 9489
 Lukoschus, F.S. 796, 8726, 8729
 Lum, P.T.M. 9062
 Lumaret, J.-P. 5982
 Luna, J.M. 6114, 8470
 Lund, H.O. 1789
 Lundberg, G. 4704
 Lundberg, H. 1258, 4480
 Lundberg, S. 4725, 7094
 Lundberg, S.G. 3645
 Lunderstad, J. 7593
 Lunderstad, J.G. 2844
 Lundgren, A.L. 7765
 Lundquist, A. 1078
 Lundqvist, N.S. 3599
 Lung, K.Y.-H. 8290
 Luo, H.-B. 8166
 Luo, Q.-C. 1778
 Luo, Q.-H. 9226
 Luquet, G. 5116
 Lusby, W.R. 109
 Lushbaugh, W.B. 3408
 Lussenhop, J. 5287
 Luthy, P. 7375
 Luttrell, R.G. 5409
 Lutz, D.A. 326
 Lux, M. 1368
 Luxton, M. 6000, 8597
 Lyakis, P. 2900, 3077, 3892
 Lvo, D.K. 8985, 9250
 Lyerly, W.H. Jr. 4515
 Lyman, J.M. 4592, 8459
 Lynch, A.M. 3779
 Lynch, R.E. 4406, 6106, 8539, 9011
 Lyons, D.W. 8906
 Lynin, D.H. 1014
 Lyon, J.P. 6474
 Lysenko, O. 7374
 Lysy, J. 4491
 Lyth, M. 2962
 Lytle, T.W. 3119
 M-Elenany, M.A. 7880
 Ma, D.-F. 2974
 Maas, R.P. 6584
 Mabuchi, T. 1816
 Mac Nally, R.C. 9063
 Macan, T.T. 3851
 MacCartter, E.E. 5335
 MacCollom, G.B. 8563
 MacConnell, J.G. 4214
 MacDonald, J.F. 6988
 MacDonald, L. 2095
 MacDonald, S.M. 8373
 MacDonald, W.L. 9276
 Macdonald, W.W. 8146
 Macedo, T.M. 8180
 Macfadden, B.J. 7280
 MacGown, M.W. 4167
 Machado-Allison, C.E. 494, 1373
 Machado, A.B.M. 6677
 Machard, P. 7051
 Machda, R. 336, 3309
 Machin, J. 236
 Mack, A.J. 3571
 Mack, T. 3304
 Mack, T.P. 584, 1234, 6022
 Mackauer, M. 714, 8318
 Mackay, D.A. 6660
 Mackay, E. 6855
 Mackay, R.J. 396
 Mackay, R.P. 6731
 Macken, L.M. 1020, 4255
 MacKenzie, A.L. 1485
 MacKenzie, D.I. 514
 MacKenzie, P.K.I. 2175
 Mackey, A.P. 837
 Mackey, W. 6855
 Mackley, J.W. 221, 1780, 6037
 Macklin, M.D. 8935
 MacLellan, C.R. 8440
 MacLennan, K.J.R. 652, 1362
 MacLeod, D.M. 5420
 MacNally, R.C. 2748
 Macpherson, I.S. 1369
 Macqueen, A. 3430
 MacVean, C.M. 3778

Author Index

- Madden, J.L. 3470.
Madden, R.H. 2348, 3895.
Maddison, W.P. 7033, 8346.
Maddox, J.V. 286.
Madel, G. 1317.
Mader, D. 7804.
Madhavan, K. 370, 3337, 5813, 1446.
Madhavan, M.M. 5813.
Madrid, F.J. 2127.
Madsen, H. 5313.
Madulo-Leblond, G. 8882.
Maeda, S. 2351.
Maeda, Y. 8088.
Maehr, D.S. 6090.
Maehr, R. 7828.
Maeki, K. 1516, 3079, 3891.
Maentzsaes, P. 5952.
Maes, J.M. 8775.
Mafti, G. 72.
Maggio, R.C. 8855.
Magira, H. 2905.
Magnarelli, L.A. 1004, 1332, 2009.
Magnusson, J. 7048.
Magoochi, J. 5719.
Maguire, R. 3461.
Maguire, D.L. 444.
Mahadevan, S. 6057.
Mahal, M.S. 5298, 5301, 6934.
Mahar, J.M. 1954.
Mahgoub, E.S. 2923.
Mahler, V. 4783.
Mahmood, F. 1296, 1902, 3650, 6697, 7850, 9073.
Mahner, V. 4768, 7241, 7934, 8742.
Mahn, J.A. 7875.
Mabon, R.J. 1556, 7875.
Macdonald, D.F. 3832.
Maboney, L. 179.
Mahowald, A.P. 3506, 5469.
Mahr, G.G. 9350.
Mahunka, S. 2385, 7139, 7142, 7932.
Mai, S.C. 1417.
Maier, C.T. 2819, 3024, 5943, 8252, 8376, 8401.
Maiga, S. 1312, 9126.
Maini, S. 2889, 4166, 6953.
Maere, A. 567, 6043.
Maison, P. 1259.
Maitlen, J.C. 3785.
Major, S.P. 7909.
Majzel, E.B. 8949.
Majer, J.D. 9174.
Majerus, M.E. 8881.
Majerus, M.E.N. 4690, 6285.
Majumdar, A.C. 6649, 6655.
Majumdar, S.K. 5040, 5045.
Mak, J.W. 5683, 5691, 6057, 7872.
Makar, P.V. 7411.
Makarchenko, E.A. 6389.
Makharra, H. 1609.
Makkouk, K.M. 3707.
Makrakis, D.V. 8955.
Mala, J. 2691.
Malagoli, M. 2823, 6472.
Malakeeva, N.M. 9232.
Malaua, J.C. 6870.
Malavasi, A. 534.
Malcolm, G. 2857.
Malcom, S.E. 4775, 4786.
Male, K.B. 948.
Maleville, J. 3694.
Maleyvar, P.R. 6746.
Malhotra, M.N. 5278.
Malhotra, S.K. 1067.
Malicky, H. 3234, 3235, 3864, 4006, 4067.
Mahl, B.S. 5372.
Malpalau, M.B. 3210.
Mall, L.P. 6801.
Mall, S.B. 7306.
Mall, N. 8058.
Mallick, R.N. 2851, 5207.
Mallock, A.J.C. 6784.
Mallom, N.R. 483.
Malogolowkin-Cohen, C. 5481.
Malone, L.A. 2632, 2633.
Malonga, J.R. 9243.
Maloua, M. 4376.
Malpica, J.M. 2487.
Maly, E.J. 5438.
Mamaev, B. 6396.
Manabe, Y. 990.
Manchanda, S.K. 6925.
Mandal, D.K. 6509.
Mangro, S.B. 5254.
Mandl, K. 7983.
Mandrachua, J. 6675.
Mane, S.D. 4256.
Manfredi, K. 3307.
Mangan, R.L. 2785, 6901.
Mangtitz, G.R. 5324, 9168.
Mangro, J.P. 536.
Mangum, C.L. 2192.
Mann, G.S. 9424.
Maner, J.F. 8306.
Manilla, G. 7105.
Manjunatha, K.R. 3898.
Mankin, U.R. 4807, 6362, 6363.
Manley, D.G. 2652, 8486, 9311.
Manley, M.J.D. 5216.
Manley, T.R. 7579, 7592.
Manlove, M.N. 7059.
Mann, B.K. 7449.
Mann, J.S. 2394.
Mann, S.K. 8287.
Mannan, M.A. 1246, 1247.
Mananila, R. 5952.
Manning, D.L. 6338.
Manning, J.E. 1502, 1539, 6240.
Manonmani, L.M. 6599.
Mansell, M.W. 1665, 4900.
Mansingh, A. 293, 8078, 8199.
Mansour, M.H. 6679, 7345.
Mansour, M.M. 6653, 6964.
Mantel, P. 4217.
Mantel, W.P. 725.
Manulis, S. 1064.
Manuwo, S. 4602, 8518.
Manzelli, M.A. 8579.
Manzur, J. 5273.
Maramorosch, K. 5743.
Marcard, L. 7823.
Marcelja, L. 1638.
March, P.A. 1684.
Marchal, G. 666.
Marchal, J. 741.
Marchant, R. 4657.
Marchi, A. 1510.
Marco, S. 684.
Marco, S. 684.
Marcos, R. 8196.
Marcos, V.C. 5872, 8006.
Marek, J. 7104.
Marenc, Z. 8183.
Margaris, N.S. 6002.
Margari, L.H. 3510.
Mari Muri, J.A. 1619, 3190.
Marr, J. 6387.
Marras, T. 1360, 3441, 3442.
Marini, M. 3141, 3144, 7097, 7098.
Manno Piccoli, M.T. 5060, 5423.
Mannori, R.C. 6357.
Mark Scriber, J. 8518.
Mark, G.A. 5483.
Markesich, A.L. 1097.
Markin, G.P. 5889, 9305.
Markina, V.V. 8962, 8965.
Markula, M. 1265.
Markl, H. 414.
Markl, J. 3305.
Markov, N.Y. 9374.
Markow, A. 402, 2750, 3929, 8375.
Marks, E.P. 2176, 4949.
Marks, R.J. 1465.
Marmaras, V.J. 933, 2579.
Maroli, M. 3133.
Maroy, P. 2691.
Marquardt, W.C. 853, 2103.
Marshall, K.J. 3348, 6184.
Marsden, P.D. 1375.
Marsh, D. 1122.
Marshall, A.G. 4387, 8708.
Marshall, J. 6084.
Marshall, J.A. 4061.
Marshall, J.E. 5517, 5556.
Marshall, L.D. 407.
Marshall, L.M. 8991.
Marshall, N. 4522.
Marshall, N.A. 4521.
Marshall, S.A. 3201, 7972.
Marson, A. 2298, 2343.
Martel, A. 5193.
Martens, J.M. 512.
Martu, O.G. 9203.
Martugonno, M.E. 3828.
Martin Mateo, M.P. 8047.
Martin Mouton, N. 8209.
Martin, A.P. 212, 5115.
Martin, D.F. 347, 1102, 2957, 6168.
Martin, J. 3888.
Martin, J.S. 1757, 8249.
Martin, M.D. 5003.
Martin, M.H. 8186.
Martin, M.M. 1757.
Martin, P. 779.
Martin, P.B. 1294, 3566, 4374, 6169.
Martin, S.J. 720, 2210, 2262.
Martin, T.J. 3770.
Martin, W. 3717, 3718.
Martin, W.W. 2152.
Martindale, C.B. 645.
Martinez, V. 3937.
Martinez Fernandez, A.R. 8192.
Martinez Gomez, F. 8045.
Martinez-Gomez, F. 8336.
Martinez, A. 6677.
Martinez, A.O. 3453.
Martinez, D.G. 6046.
Martinez, E. 724.
Martinez, M. 6498, 8761.
Martinez, P. 3060.
Martinho, M.R. 1543.
Martins, U.R. 4807, 6362, 6363.
Martins, D.G. 2652, 8486, 9311.
Martos, R. 3465.
Martouret, D. 1825.
Martynuk, J. 8258.
Marwaha, K.K. 3031, 5400.
Marw, R. 3431.
Marzouk, A.S. 8069.
Masad, Y. 7714.
Masayo, T.M. 9280.
Masaki, S. 4339, 7439.
Masalkina, T.M. 8860.
Maschat, F. 1523, 7823.
Maschwitz, E. 476.
Maschwitz, U. 476.
Maslupina, O. 4586.
Maslennikova, V. 5820.
Maslennikova, V.A. 6639.
Masler, E.P. 6552.
Masner, L. 2460, 2484.
Masner, C.E. 5923, 9083.
Masner, C.F. 8373.
Masner, G.F. 4694.
Masner, G.N. 9317, 9329.
Masner, P.J. 8631.
Masner, T.E. 3693.
Masner, W.H. 366.
Masner, W.R.M. 1647, 6437.
Massey, M. 3094.
Massey, H.R. 946, 1037, 3452.
Massey, C. 915, 4130.
Massey, G. 1259.
Massey, Z. 6386.
Masseybroek, H.A.K. 7303.
Massey, V.C. 5872, 8006.
Masuda, T. 320.
Masura, M.E.A. 3178.
Masu, J. 6368.
Masud, S.B. 1813, 9049.
Masud, E.L. J.R. 2008.
Masud, J.P. 8262.
Masud, T.N. 6618.
Masud, R.L. 8510.
Masud, G. 2031, 2092.
Masud, J. 8975.
Masud, W.N. 4834, 7962.
Masud, A.P. 1079.
Masud, G. 3451, 4619.
Masud, C.K. 3565, 7673.
Masud, T. 4969.
Masud, L. 1623, 2412.
Masuda, K. 486, 7528.
Masuda, M. 5463.
Masuda, H. 8184.
Masuda, M. 7721.
Masumoto, S. 3360.
Masumoto, Y. J. 1912, 3358, 3439, 3580, 7341.
Masumura, F. 623, 3538, 5049.
Masumura, S. 7277.
Masumura, W. 853, 2103.
Masumura, H. 3348, 6184.
Masud, P.D. 1375.
Marsh, D. 1122.
Marshall, A.G. 4387, 8708.
Marshall, J. 6084.
Marshall, J.A. 4061.
Marshall, J.E. 5517, 5556.
Marshall, L.D. 407.
Marshall, L.M. 8991.
Marshall, N. 4522.
Marshall, N.A. 4521.
Marshall, S.A. 3201, 7972.
Marson, A. 2298, 2343.
Martel, A. 5193.
Martens, J.M. 512.
Martu, O.G. 9203.
Martugonno, M.E. 3828.
Martin Mateo, M.P. 8047.
Martin Mouton, N. 8209.
Martin, A.P. 212, 5115.
Martin, D.F. 347, 1102, 2957, 6168.
Martin, J. 3888.
Martin, J.S. 1757, 8249.
Martin, M.D. 5003.
Martin, M.H. 8186.
Martin, M.M. 1757.
Martin, P. 779.
Martin, P.B. 1294, 3566, 4374, 6169.
Martin, S.J. 720, 2210, 2262.
Martin, T.J. 3770.
Martin, W. 3717, 3718.
Martin, W.W. 2152.
Martindale, C.B. 645.
Martinez, V. 3937.
Martinez Fernandez, A.R. 8192.
Martinez Gomez, F. 8045.
Martinez-Gomez, F. 8336.
Martinez, A. 6677.
Martinez, A.O. 3453.
Martinez, D.G. 6046.
Martinez, E. 724.
Martinez, M. 6498, 8761.
Mayer, R.T. 1043, 1512, 5693, 8958.
Mayfield, J.E. 7473.
Mayfield, M.R. 7037.
Mayfield, D.E. 7656, 7659.
Maynard, R. 1897.
Mayor, A. 7951.
Mayor, A.J. 7937.
Mazokhin-Porshnyakov, G.A. 6695.
Mazomenos, B.E. 5005.
Mazor, M. 2078.
Mazor, G.D. 5825.
Mazor, M. 19.
Mazur, S. 8768.
Mazzini, M. 4937, 6634, 7267.
Mazzone, H.M. 5392.
McAlpine, J.F. 3158, 4702.
McArthur, E.D. 4392.
McBrde, J. 9287.
McC Newbery, D. 4708.
McCabe, T.L. 4931, 7509.
McCaffery, W.P. 2432, 2498, 4846.
McCaffery, A.R. 3523.
McCaffery, J.P. 4916.
McCluskey, G.L. 2642.
McCann, F. 6705.
McCarthy, B.J. 8625.
McCartney, D.A. 611.
McCartney, C.J. 9352.
McCart, J.C. 8868.
McCart, M.K. 5198, 5884, 9105, 9161.
McCauley, D.E. 1148, 4298.
McClain, E. 3312.
McClain, A. 3876.
McClain, G.A. H. 374.
McClure, J.B. 1759.
McClure, S. 526, 3836, 6173, 8697.
McCollum, W.A. 6149.
McCoyle, C.W. 4548.
McCoyle, E.D. 3622, 5241, 6833.
McCoyle, P. 1817, 3604.
McCoyle, R. 8648.
McCrane, A.W.R. 3524, 6673.
McCulloch, J.H. 1424.
McCulloch, L. 3557.
McCuchoon, G.S. 507.
McDaniel, B. 3381, 3171, 7917.
McDaniel, L.N. 1897.
McDaniel, R.G. 3453.
McDaniel, S.G. 2108, 6124.
McDermid, H. 655.
McDonald, C.A. 1365.
McDonald, D. 5360.
McDonald, F.J.D. 4941, 5809, 7985.
McDonald, G. 3253.
McDonald, J.C. 2328.
McDonald, J.A. 4995.
McDonald, J.F. 182, 7481.
McDonald, L.L. 222, 2241.
McDonough, L. 521.
McDonough, L.M. 216, 740, 2226, 5701, 5703, 5901, 6144.
McDonough, A.W. 4675.
McDowell, P.G. 3355.
McEnroe, W.D. 7587.
McEvey, S.F. 3953.
McEwen, F.L. 6143, 8249.
McFadden, M.W. 2216.
McFadden, T.L. 1834.
McFadyen, P. 1432.
McFarlane, J.E. 1121, 3484.
McGarry, J.W. 3133.
McGaughey, W.H. 8474.
McGhee, R.B. 3408, 8363.
McGill, J.D. 104.
McGovern, P. 2022, 1364, 5669.
McGovern, W.J. 2225, 5293.
McGowan, M.J. 4997, 5276.
McGuffin, M.E. 6553.
McGuffin, W.C. 5654.
McInnes, D.O. 2309, 3634.
McIntosh, A.H. 1728, 2512.
McIntosh, B.M. 1380.
McIntyre, P. 134, 4971.
McIver, S. 3290, 4137.
McIver, S.B. 4142, 8921.
McKay, M.L. 2903.
McKean, J.D. 642.
McKechne, S.W. 5492, 9431.
McKenzie, C.E. 514.
McKenzie, J.A. 7873, 9431.
McKenzie, T.L. 9221.
McKeown, B.A. 931.
McKercher, D.G. 8413.
McKinlay, R.G. 3473.
McKinley-McKee, J.S. 7315, 7316.
McKinley, D.J. 2619.
McLachlan, A.J. 6832.
McLachlan, D.R.C. 7860.
McLain, D.K. 398, 1142, 1898, 2898.
McLaren, I.W. 1410.
McLaughlin, J. 5790.
McLaughlin, J.R. 1383, 1900, 2585, 4624, 5840, 9346.
McLaughlin, R.E. 5765, 6159.
McLean, D.L. 1699, 4362, 4366, 6096.
McLean, D.M. 1017.
McLean, I.F.G. 5105, 9442.
McLean, J.A. 5387.
McLean, R.G. 637, 3655.
McLeod, D.G.R. 2102, 8555.
McLeod, P.J. 6138.
McMahon, F.A. 6999.
McMahon, J.P. 1327.
McMillan, W.W. 2039, 2044, 3716, 4625, 5395, 6899, 9272, 9318.
McMurry, J.A. 6719.
McN Scott, R. 1820.
McNally, P.S. 5347.
McNry, T.J. 2990.
McNeal, C.D. 6198.
McNeil, A.C. 6030.
McNeil, J. 2043, 5873.
McNeil, J.N. 3420.
McNeill, S. 2904.
McNew, R.W. 3121, 3246, 5276.
McPherson, B.A. 1225.
McPherson, J.E. 474, 1717, 1952, 1976, 1977, 1984, 1985, 1987, 5092, 7130, 7462, 7919, 8292.
McPherson, R.M. 6190, 9353.
McQuay, P.B. 3222.
McQuillan, P.B. 3222.
McRae, K.B. 1395, 2684, 8214.
McSorley, R. 709, 4567.
McTier, T.L. 9260.
McWilliams, J.M. 1457.
Meagher, R.L. Jr. 5444, 9048.
Meek, S.K. 6585, 6588, 6655.
Medner, H. 311.
Medrano, F. 6197.
Medved, R.A. 1463.
Medvedev, L.N. 6383.
Meek, S.R. 8146.
Mehtora, K.N. 369, 403, 487, 1300, 1301, 1302, 9289.
Meerman, J. 217.
Meuse, A.D. J. 2061.
Mehl, Y.M. 3093.
Mehlich, H. 4184, 5024.
Mehlich, D. 2011.
Mehrotra, K.N. 2559, 2560, 2644, 4988, 4996, 7378.
Mehrotra, P. 2985, 5280, 5307, 6070.
Mehra, P.K. 1088.
Mehro, D.N. 7678, 7707, 7710, 7740.
Mener, P.G. 4314.
Meyer, G.T. 8185.
Meyn, C. 9393.
Meinander, M. 2468, 4901, 4902, 4908.
Meinke, L.J. 6125.
Meinwald, J. 6212, 4304.
Mensch, M.V. 640, 744, 6093, 6201.
Mensch, A. 8331.
Menschinkel, R. 8796.
Menzner, A.J. 2286.
Mekongse, B. 4568.
Meler, M.E. 1054.
Meleney, W.P. 651, 6892.
Meland, D. 7353.
Mellini, E. 2669, 2822, 2823, 2825, 2826, 2829, 6631, 6764, 6766, 6772, 6773.
Mellini, E.O. 6472.
Mellink, J.S. 4504, 5160, 7626.
Mello, M.L.S. 760, 2421, 3883, 7844, 8982.
Mello, P.S. 3413.
Mellors, W.K. 450.
Meltzer, D.G.A. 9146.
Menzar, D. 2234.
Menashe, M. 1057.
Menashe, B.P.H. 6529.
Mendez, Z. 4372, 9178.
Mendes dos Santos, J.M. 7527.
Mendes, E.G. 4174, 9986.
Mendes, L.F. 4065.
Mendes Garnica, J.M. 5157.
Mendi, H. 4728.
Mendlinger, S. 3603.
Meng, X.Z. 57.
Meng, L.T. 7923.
Mener, J.J. 9464.
Menn, J.J. 3709, 5718.
Menon, P.K.B. 614.
Menzel, R. 4973, 4974, 6687.
Menze, C.A. 756.
Menola, S.M. 1512, 5063.
Mercer, A.R. 6887.
Mercer, C.F. 369, 403, 487, 1300, 1301, 1302.
Mercot, H. 3926.
Meredith, J. 7310.
Meredith, S.E.O. 2568, 7326.
Merkel, F.W. 6432, 6995.
Menno, M.E. 659.

- Merkel, E.P. 3560.
Merkel, M.E. 614.
Merkle, J.R. 418, 1476.
Merkle, O.G. 4638, 8460.
Merklinger, F. 7064.
Merkle, D. 2223, 2224.
Merrill, C. 5194.
Mernaugh, R.E. 3416.
Merritt, C.L. 6606.
Merrill, C.R. 165.
Merritt, G.C. 1917.
Merritt, R.W. 477, 1757.
Merritt, S. 3875.
Mertens, J. 6001.
Mertens, J.W. 1703.
Mesbah, A.A. 6952.
Messner, M. 4263.
Mesquida, J. 4582.
Messner, B. 6537.
Messersmith, D.H. 2413.
Messina, F.J. 2073, 5143, 8360.
Mester, K. 8083.
Meszaros, Z. 2845.
Meszleny, A. 3835, 5893.
Metcalfe, R.E. 4510.
Metcalfe, R.L. 7187.
Metterhouse, W.W. 2216.
Metzler, L.E. 3634.
Metzner, R.V. 7441.
Metzner, S.H. 4761.
Metzner, P. 6544.
Metzner, M. 4653.
Metzner, M. 8404.
Mey, W. 7052.
Meyer-Rochow, V.B. 904.
Meyer, B. 7828.
Meyer, G.T. 8178.
Meyer, J.A. 2173, 2199, 8583, 8857.
Meyer, J.R. 8061.
Meyer, L. 3880.
Meyer, R.H. 7755.
Meyer, R.P. 582, 1125, 9221.
Meyerdrick, D.E. 2189, 3018, 5800, 6116.
Meyers, E.M. 3065.
Meynador, G. 1825.
Meyran, J.-C. 6548.
Mezzanotte, R. 1510, 3084.
Migladze, V.M. 9461.
Miguel, V.A. 762.
Miano, V. 6968.
Mian, L.S. 3787, 8572.
Miao, J.-W. 4685.
Michaels, H.N. 6299, 9159.
Michailova, P. 2408, 6411.
Michal, K. 8218.
Michel, M. 3138, 6515.
Michel, M.F. 2622.
Michalakakis, S. 1256, 1686.
Micheli, A. 3090.
Michels, G.J. Jr. 9314.
Michels, M.F. 1585.
Michelsen, A. 4976.
Machner, C.D. 5421, 6335, 6414.
Mackelkauff, W.W. 1584.
Middleton, E.J. 5003.
Mielke, M.E. 9276.
Mielke, O.H.H. 8838.
Mielke, P.M. 1556, 7875.
Migliani, G.S. 2337, 3909.
Mihaly, Z. 3656.
Mika, P.G. 1249.
Mike, A. 5745.
Mikhalova, E.V. 6463.
Mikhajlova, E.V. 6464, 6465.
Mikhajlov, S.A. 5412.
Mikula, K. 4894, 7220.
Mikolajczak, K.L. 6700.
Milby, M.M. 6745.
Milchunas, D.G. 2990.
Miles, P.W. 7559, 7567.
Miller, B.R. 7386.
Miller, C.E. 1951.
Miller, C. 1693.
Miller, D.R. 1637.
Miller, E.R. 6291.
Miller, G.E. 6640.
Miller, G.L. 5639.
Miller, G.V. 2539.
Miller, G.W. 7460.
Miller, H.L. 2065.
Miller, J.A. 2172, 4520.
Miller, J.C. 2228, 8282, 8312.
Miller, J.R. 1730, 411, 421, 485, 1239, 1772, 7343.
Miller, K.V. 3826, 8487, 9204.
Miller, L.A. 2188, 2207, 5662, 7767.
Miller, L.H. 4483.
Miller, L.K. 1035.
Miller, L.R. 1482.
Miller, M.C. 1769.
Miller, O.J. 7833.
Miller, O.L. Jr. 4675, 7839.
Miller, P.L. 3262, 4987, 8210.
Miller, R.B. 2834.
Miller, R.C. 4671.
Miller, R.C. Jr. 3878, 9389, 9396.
Miller, R.D. 922.
Miller, R.F. 7127.
Miller, R.W. 2176, 9326.
Miller, S. 6273.
Miller, S.E. 2404, 7183.
Miller, S.G. 2575, 6556, 6567, 6572, 8896.
Miller, T.W., Jr. 674.
Miller, T.W. Jr. 6128, 6601, 8415.
Miller, V. 6760.
Miller, W.E. 9491.
Millet, A. 3833.
Mildidge, A.F. 2390, 5549.
Mills, A.T. 2348.
Mills, N.J. 5167, 6018, 6739, 8298.
Mills, R.B. 5344, 6112, 9048.
Mills, R.C. 4933.
Milne, C.P. Jr. 8589, 8595.
Milne, W.M. 2938.
Milner, M.J. 7328.
Milner, R.J. 624, 830, 2646, 8128.
Milosavljevic, V. 1413.
Milstead, J.E. 1814.
Miltard de Azevedo, E.M.V. 4933.
Minamatake, Y. 961.
Minder, I.F. 7466.
Ming, C.L. 5766.
Mink, B. 4133.
Minko, G. 8968.
Minsall, G.W. 5434.
Mintzas, A.C. 5830.
Mintzer, A. 7799.
Mintzer, A.C. 8257.
Miquel, J. 353, 1755.
Mir, A.K. 1734.
Miranda, G.S. 5278.
Mirenda, J.T. 1991, 9365.
Mirikami, A.A. 864.
Mironev, A.N. 9255.
Mirre, G.B. 3832.
Mirsalis, J.C. 8198, 8203.
Mirzabekov, A.D. 6245.
Mischew, Z. 2766.
Mischman, M.M. 6200.
Mischke, D. 6242.
Mischke, U. 86.
Mishima, J. 7254.
Mishra, M.D. 7652.
Mishra, S. 9487.
Mishra, S.C. 926, 949, 1747, 5418, 7716.
Miskimen, G.W. 1680.
Mispagel, M.E. 5710.
Misra, B.C. 8618.
Misra, S.C. 6931.
Misra, S.D. 7434.
Misra, S.S. 1517, 4552.
Misra, U.S. 6624, 6674.
Mitchell, B.K. 4132.
Mitchell, B.K. 2242, 8528.
Mitchell, E.R. 382, 911, 1924, 2238, 3763, 4624, 5120, 9346.
Mitchell, H.K. 1498, 5686.
Mitchell, J.C. 6035.
Mitchell, L. 1951, 7617.
Mitchell, M.J. 8601.
Mitra, G.A. 8946.
Mitra, K. 9050.
Mitra, S.K. 5254.
Mitra, S.R. 1065.
Mitrofanov, A.M. 9013.
Mitrofanov, V.I. 6342, 6347.
Mitsushashi, J. 876, 2485, 2514.
Mitsui, Y. 3580.
Mittal, O.P. 7035, 7841, 9407.
Mitter, C. 8664.
Miura, K. 881.
Miura, T. 6224.
Miya, K. 1098.
Miyagi, I. 7574.
Miyahara, Y. 1138, 9475.
Miyakawa, Y. 4141.
Miyake, S. 2276, 7000.
Miyamoto, T. 3100.
Miyashita, Y. 2595.
Miyata, T. 1840, 2659, 3434, 3449, 5042, 7407.
Miyazaki, M. 5985.
Mize, T. 536.
Mizell, R.F. 6014.
Mizell, R.F., III. 1742, 2082.
Mizoguchi, A. 8980.
Mizoguchi, Y. 5484.
Mizukubo, T. 804.
Mizuno, T. 210, 3463, 4162.
Mizutani, A. 3843.
Mizutani, M. 7254.
Mladenov, M. 9288.
Moav, R. 1980.
Moberg, A. 7077.
Mock, D.E. 543.
Mockford, E.L. 4063.
Mockquard, J.P. 6643.
Modder, W.W.D. 2565.
Moed, H.A. 2843.
Moeller, F.E. 4591.
Moermans, R. 1024.
Moffat, R.J. 6582.
Moffett, J.O. 1433, 4475, 6937.
Moffett, R.B. 2302.
Mog, T.P. 3779.
Mogi, M. 5855.
Mohamed, A.K.A. 9006, 9134.
Mohamed, M.A. 5722.
Mohamed, U.V.K. 929.
Mohar, N.I. 1836.
Mohanasundaram, M. 3964, 7133, 7134, 7136, 7141, 8715.
Mohandas, N. 1847.
Mohana, H.H. 9023.
Mohanty, P.K. 5468.
Mohanty, S.C. 1083, 2668.
Mohd-Salleh, M.B. 5051, 5052, 5779, 5780.
Mohr, P.B. 6121.
Mohr, W. 5724.
Mohring, W. 6396.
Mohr, Z.H. 1572, 3866, 9016.
Mohty, A.L. 2979.
Moin, N. 1181.
Mokry, J.E. 6331.
Moldenke, A.F. 6561.
Moldenke, A.R. 1544, 1564, 7945.
Molina Martin, E. 8192.
Molland, S. 3694.
Mollay, C. 3431.
Molloy, D. 1014, 1817, 1842, 3005, 3664, 8152.
Molloy, D.P. 3403.
Molnar, J. 2304.
Molnar, S.K. 1347, 3681, 5277, 8408.
Molmann, U.G. 4184, 5024.
Molyneux, D.H. 50, 1021, 1339, 2914, 2915, 2936, 7614.
Momin, D.K.M. 4621.
Monclaus, M. 1578.
Monclaus, B.K. 6349.
Mondal, S. 9699, 7137, 7138, 8714.
Mondet, B. 3213.
Monnet, D.J. 6558, 6562.
Monn, J.Y. 4188.
Monne, M.A. 4800, 4807, 6367.
Monson, J.M. 8625.
Monson, W.A. 1265.
Montague, J.R. 2785.
Montgomerie, R.D. 571.
Montgomery, E. 9425.
Montgomery, M.E. 4150, 5807, 8326.
Montoya, M. 634.
Montu, N. 1333.
Moody, J.E. 8332.
Moody, J.V. 6995.
Moon, R.D. 715, 1274, 5181, 9141.
Moons, M.P. 2836, 5201.
Moore, B.P. 1785, 4945.
Moore, D. 4981.
Moore, J. 1738, 2896.
Moore, J.A. 1249, 3127, 3601, 6814.
Moore, J.W. 2295.
Moore, L. 1434.
Moore, N.F. 982, 1032, 1827, 5035, 5748, 8147, 8989, 8990, 8991.
Moore, R.F. 4584, 4612, 6194, 8276, 8519, 8582.
Moore, T.B. 4392.
Moraes, G.J. 4197.
Moraes, M.A.P. 3196.
Morales, J. 3991.
Morales, S.N. 8949.
Morales-Rejesus, B. 7394.
Moran, D.T. 145, 8918.
Moran, N. 5963.
Moran, V.C. 6842.
Morata, G. 1084, 4674, 6272.
Morcillo, G. 7827.
Mordue, W. 969, 2613.
Moreau, J. 7823.
Moreira, C. 8426.
Moreno, C.M. 5032.
Moreno, A.V. 2466, 3142.
Moreno, S.C. 5703.
Morey, R.J. 9167.
Morgan, A.V. 7127.
Morgan, C.E. 9071.
Morgan, D. 695.
Morgan, E.D. 254, 973, 5867, 6576, 7331.
Morgan, L.A. 8220.
Morgan, M.R.J. 164, 8110, 8936.
Morgan, N.O. 3444.
Morgan, P. 5492.
Morgan, P.B. 6903.
Morgante, J.S. 534.
Morge, G. 6499, 6920.
Mori, A. 5159.
Mori, H. 1184.
Mori, K. 1157, 2258, 2595, 4165, 4313.
Mori, L. 8242.
Morici, M. 3340.
Morimoto, K. 1599, 1608, 3979.
Monsak, D.J. 3744, 3799.
Monsak, M. 2690.
Monsim, L. 3509.
Montz, R.F.A. 4697, 8570.
Moriyama, H. 2570, 7317.
Morley, J.E. 4302.
Morozov, Y.A. 9124.
Morris, C.D. 5620, 6875.
Morris, C.K. 1151.
Morris, J.W. 9199.
Morris, M.G. 2121, 5245.
Morris, O.N. 1386.
Morris, P.W. 4158, 8953.
Morris, R.F. 3160, 8692.
Morris, W.R. 2292.
Morrison, B. 1323.
Morrison, B.R.S. 8607.
Morrison, N.H. 5150.
Morrison, P.E. 102, 342, 4159, 8241, 9051.
Morrison, R.D. 6962.
Morrison, R.K. 1448.
Morrison, W.P. 9102.
Morrow, J.F. 4661.
Morse, D.H. 457, 2050, 2115, 6780.
Morse, J.C. 1678, 5651.
Morse, J.G. 3128.
Morse, P.M. 6627.
Morse, R.A. 1983, 2046, 5945, 8287, 8592.
Mortensen, R.W. 2015.
Morton, A.A. 9418.
Morton, A.C. 6699.
Morton, R. 1472, 2880.
Morton, R.A. 7878.
Morton, T.C. 3741, 3757.
Morvan, P. 4798.
Moscardi, F. 1934, 6154.
Moschonas, N.K. 4666.
Mosier, J.C. 3046.
Mosh, F.W. 3616.
Mostafa, S.A.S. 3738, 5762.
Mostert, D.J. 5282, 5284.
Mote, M.I. 918, 3296.
Moite, U.N. 7676.
Mothes, U. 2546, 3269, 7764.
Motten, W.A. 1265.
Mottet, M. 2941.
Mouchet, J. 4546, 9244.
Mounaji, K. 100.
Mound, L.A. 1261, 4064, 5505, 5610.
Mount, S.M. 1499.
Mourao Duarte, F.A. 4586.
Mourao, C.A. 5499.
Mourikis, P.A. 7329.
Mouris, K.S. 7591.
Mowat, D.J. 720, 220, 2262.
Mowry, T.M. 4092.
Moxon, L.B. 5695.
Moyer, J.W. 3819.
Moyle, P.L. 3406.
Mracek, Z. 9173.
Mraz, C. 2180.
Mrena, E. 666.
Muche, W.H. 4102.
Muechmore, W. 8743.
Muechmore, W.B. 5552, 5553.
Mueckenthaler, F.A. 98.
Muda, A.R.B. 1732.
Mudd, A. 4384.
Mueck, V.O. 7379.
Muechbauer, F.J. 8530.
Mueche, R. 7833.
Mueller-Liebenau, I. 7191.
Mueller, A. 6591.
Mueller, D.D. 2576, 6519.
Mueller, E. 6591, 8925.
Mueller, H.J. 7575.
Mueller, K. 6230.
Mueller, L.D. 2864, 2867.
Muggleton, J. 1058, 1489, 5470.
Muir, R.W. 669.
Muir, W.M. 385.
Murread-Thomson, R.C. 5053.
Murread, W.A. 728.
Mukammal, E.I. 705.
Mukerjee, A.K. 1053.
Mukherjee, A.B. 3082.
Mukherjee, A.S. 2301.
Mukherjee, P. 5252.
Mukherjee, T. 2310.
Mukherjee, Y.K. 6801.
Mulla, M.S. 1353, 1572, 3787, 3866, 4601, 5859, 6471, 6691, 8546, 8572, 9016.
Mullen, G.R. 7968.
Mullen, M.A. 1233, 1876.
Mullens, B.A. 4081, 6024.
Muller, C.A. 5000.
Muller, J. 8033.
Muller, M.J. 3678.
Mulligan, P.K. 1530.
Mullins, B. 8529, 8540.
Mullins, D.E. 5011.
Mullins, J.W. 446.
Mullins, W. 3429, 6191.
Muma, M.H. 1595, 1953.
Mumcuglio, Y. 641, 658, 672, 1374, 5287.
Mumford, D.L. 9273.
Mumma, R.O. 4999.
Munari, L. 3998.
Muncuglio, Y. 655.
Mundali, E.C. 1884.
Mundhe, D.R. 7672.
Munio, A.M. 940, 8091.
Munipappu, N. 7174.
Munstermann, L.E. 2868.
Munzaro, M. 8941.
Muona, J. 7897.
Murd, H. 929.
Muralakami, Y. 4438, 4448, 4545.
Muralidharan, N. 2088.
Muralirangan, M.C. 461.
Muran, A.F. 276.
Murdock, L.L. 128.
Murray, B. 1808, 2013.
Murti, J.K. 3455.
Murphy, J. 1536.
Murphy, P.A. 7059.
Murphy, S.T. 8319.
Murray, A.B. 1325.
Murray, D.A. 4928, 7806.
Murray, M.D. 3678.
Murray, N.D. 3925.
Murrell, C.D. 544, 1411, 2010.
Murtazae, D.M. 9242.
Murthy, B.N. 7742.
Murthy, A.M. 9931.
Musso, J.J. 77.
Mustafa, M. 6623.
Mutch, R.A. 4780.
Mutchmor, J.A. 7360.
Mutter, C.M. 3616.
Muth, D.J. 1457.
Muthu, M. 1074.
Mutinga, M.J. 47, 1317, 1335, 3567, 8157, 8286.
Muto, K. 6055.
Mutt, J.A.M. 32, 3988.
Mutuura, A. 8699.
Mwakikuli, T. 4511.
Mwamba, P.M. 4495.
Mwambula, J. 6968.
Myartseva, N.S. 6434, 6440.
Myatzeva, E.A. 6717.
Myer, E.P. 144.
Myers, A.A. 9453.
Myers, A.L. 8020.
Myers, J.H. 2907.
Myers, P. 6600.
Myers, W. 5349.
Mynhardt, M.J. 2029, 4874.
Myskova, H. 958.
Na Nakorn, C. 4499.
Nacheva, I. 9432.
Nachman, G. 2882, 3625.
Nachtgall, W. 6468, 7287.
Nada, S.M.A. 6424, 6425, 6514.
Nadarajan, L. 1396, 7458.
Nadchatram, M. 9, 11, 5947, 6056, 8726.
Nadig, A. 72, 9465.
Nagai, T. 7253.
Nagaki, B. 7253.
Nagin, M. 6109.
Nagarkatti, S. 1746.
Nagasawa, S. 1066.
Nagase, H. 2445.
Nagata, T. 320.
Nagata, H. 8979.
Nadal, N. 8981.
Nahas-Zahredine, G. 4647.
Naidu, S. 6057.
Nair, C.P.R. 1843.
Nair, K.K. 7832.
Nair, K.R. 6761.
Nair, K.S. 2092.
Nair, P.B. 8830.
Nair, R.B. 2182, 4178, 4179.
Nair, R.V. 9280.
Nair, V.S.K. 9061.
Nanthani, R.C. 7548.
Natio, A. 5985.
Nait, J. 4155.
Nakada, T. 3088.
Nakagaki, S. 2592.
Nakagawa, K. 4165.
Nakagawa, N. 2258.
Nakagawa, S. 5795, 5796.
Nakahara, S. 3951.
Nakajima, T. 2665.

16

- Nakajima, E. 3376.
 Nakajima, M. 1849, 5795, 5796.
 Nakajima, S. 6621.
 Nakajima, T. 961.
 Nakakita, H. 1046, 3916, 7469, 8217.
 Nakamori, H. 2768.
 Nakamura, H. 1270.
 Nakamura, K. 218.
 Nakano, O. 6189.
 Nakashima-Tanaka, E. 3447.
 Nakasone, T. 5625.
 Nakayama, T.O.M. 378.
 Nakayori, H. 1850.
 Naito, Y. 2683.
 Natsu, N. 6920.
 Naoshima, Y. 2596.
 Napp, D.S. 3664, 6371, 6487.
 Napp, M. 3114.
 Nappi, A.J. 1819.
 Nard, B. 963.
 Narang, R.C. 2430, 3897, 7036.
 Narang, S. 5458.
 Narango, S.E. 234, 1859, 1994.
 Narasimhan, C.L. 3409.
 Narayana, A.C. 3844.
 Narayanan, C.R. 7347.
 Nardi, J.B. 3457.
 Nardon, P. 5174.
 Naredran, T.C. 7216.
 Narog, M.G. 8472.
 Narris, M. 456.
 Narisubek, E.P. 381.
 Nasir, H. 2773, 5236.
 Nasctchi, G. 4937.
 Nasceema Bevis, S. 1843, 2089.
 Nash, D. 3095.
 Nash, R. 4705, 9451.
 Nash, W.G. 165.
 Nash, W.T. 544, 1411, 6081.
 Nasir, A.R.K. 6350.
 Nasreen, S. 8993.
 Nassar, O.A. 8761.
 Nasheh, M.O. 7534, 9025.
 Nassif, M.A. 3738.
 Nasu, S. 1215, 2485.
 Nasu, Y. 129.
 Natal, D. 4498.
 Natarajan, K. 3565, 7673.
 Natl Samu, T. 8898.
 Nath, V. 7415, 7706, 7711, 7712.
 Natson, J.L. 5148, 6586.
 Natson, S. 3318, 8088.
 Navetski, E.T. 9290.
 Nazife, J. 8625.
 Naumann, C. 1573, 7072.
 Naumann, C.M. 4732.
 Naumann, I.D. 2458, 8819.
 Naumov, R.I. 9229.
 Naumov, E.S. 4983.
 Navarajan Paul, A.V. 7544.
 Navarro, S. 1445.
 Nawrocka, B. 6139.
 Nayak, B. 5468.
 Nayaz, K.I. 855, 1320, 3697.
 Nazarczuk, R.A. 233.
 Neal, W.Jr. 702.
 Neal, J.W. Jr. 8877.
 Neale, Y. 2866, 2886.
 Nebeker, T.E. 1742, 2082, 6014.
 Nebels, A. 7244.
 Nechaeva, L.K. 914.
 Neel, R. 7269, 8042.
 Neckmeyer, W. 3877.
 Neder de Roman, L.E. 6704.
 Nedopokkina, S.F. 3347.
 Neff, J.L. 91.
 Negishi, T. 4165.
 Negrobrot, D.P. 6499.
 Nes, M. 3062.
 Neilson, S.D. 6178.
 Neilson, W.T.A. 2684.
 Neitz, A.W.H. 1070.
 Nel, A. 5282, 5284, 6825.
 Nel, J.A.J. 9193.
 Nelson, B. C. 1321.
 Nelson, D. 4995.
 Nelson, D.L. 1803, 7761, 8253.
 Nelson, D.R. 108, 229, 4089, 5627.
 Nelson, G.H. 7955.
 Nelson, J.H. 2481, 3756, 6101.
 Nelson, J.M. 6308.
 Nelson, L.G. 3873.
 Nelson, R.L. 6745.
 Nelson, W.A. 285, 5275.
 Nema, H.A. 6570.
 Nemeo, V. 6750.
 Nemoto, H. 218, 2227.
 Nene, Y.L. 9001.
 Nenrow, W. 6732.
 Nepomniashchik, V.A. 9089.
 Nenrov, V.M. 7109.
 Nes, W.R. 5690.
 Nesbitt, B.R. 862, 1465, 3354, 5871.
 Nesom, G.L. 4396.
 Nestler, C. 126.
 Neto, S. 6098, 6834.
 Nettles, W.C. Jr. 432.
 Nettles, W.C. Jr. 4321.
 Nettleton, W.A. 4336.
 Neuenschwander, P. 1686, 3620.
 Neukirch, A. 4741.
 Neukirch, R.K. 1763.
 Neuman, W. 8953.
 Neumann Visscher, S. 4264.
 Neumann, H.H. 705.
 Neumeier, C. 3301.
 Neuzig, H.H. 2521, 7265.
 Neuvonen, S. 9162.
 Neuwirth, A. 7020.
 Neuwirth, M. 995.
 Neves, D.P. 5350.
 Neveu, A. 2223, 2224.
 Nevill, E.M. 5725.
 Neville, R. 965.
 New, T.R. 3026, 3227, 3554.
 Newbold, G. 5507, 9127, 9158.
 Newbold, J.W. 736.
 Newcomb, B.A. 8611.
 Newcomb, R.W. 8957.
 Newell, I.M. 3018.
 Newkirk, M. 1950.
 Newlands, G. 645.
 Newman, S.M. Jr. 765.
 Newman, S.M. Jr. 4246.
 Newman, T.M. 6523.
 Newson, L.D. 607, 9353.
 Newton, J. 5881.
 Newton, J.R. 3815.
 Neznanov, N.S. 9379.
 Ngoka, J.M. 1335.
 Ngulube, F. 6968.
 Nguyen Duy-Jacquemin, M. 4140.
 Nguyen, T.X. 864.
 Niaz, S. 7602.
 Nicolson, D.D. 3587.
 Nichols, J.T. 710.
 Nichols, C. 2328.
 Nickla, H. 7453.
 Nicklas, W. 8469.
 Nickle, D.A. 2025, 2360, 2472, 2803.
 Nickle, W.R. 3749.
 Nickol, B.B. 1012.
 Nickolsky, V.I. 6940.
 Nicolson, G. 8092.
 Nicola, P. 1712.
 Nicolas, G. 3341, 4163.
 Nicolson, S.S. 4919.
 Nicolson, G. 1829.
 Niculescu, E.V. 1, 2463.
 Niebala, W. 3971.
 Niehaus, M. 4956, 4957.
 Niel, L.L. 2002.
 Nielsen, G.F. 3628.
 Nielsen, E.S. 4886, 4898, 5515.
 Nielsen, T.D. 6331.
 Nielsen, M.W. 6421, 8220, 8805, 8806, 8807, 8808.
 Niemczyk, H.D. 1867.
 Niemela, P. 4327.
 Niemi, P. 595, 9162.
 Nienker, H.M. 532.
 Niemec, S.M. 5826.
 Niesel, D.W. 4670.
 Nieser, N. 7809.
 Nigam, P.C. 5302.
 Nigg, H.M. 8204.
 Nigam, H.F. 3517, 6573, 8245.
 Nijar, A.S. 7757, 7774.
 Nikam, P.K. 1022, 8315.
 Nikolaev, S.G. 7805.
 Nikolaeva, G.M. 6469.
 Nikolajev, G.P. 7947.
 Nilakhe, S.S. 1456, 2081, 2235.
 Nilsson, R. 852, 8529, 8529, 8530.
 Nilsson, A. 3385, 3986.
 Nilsson, A.N. 3857, 8041.
 Nilsson, C. 4656.
 Nishida, A. 1820.
 Nishida, L. 1838, 2662, 5309.
 Nishida, R. 3349.
 Nishimoto, T. 101.
 Nishimoto, J. 101, 924, 925, 1023, 7381, 7382, 8077.
 Nishimoto, J.I. 8261.
 Nishimura, K. 5795, 5796.
 Nishimura, M. 991, 3279.
 Nishimura, T. 4231.
 Nishino, C. 970, 1923.
 Nishino, C. 715.
 Nishio-Wong, J.Y. 7572.
 Nishio, A.N. 4929.
 Niss, C.E. 8944.
 Nixon, M. 5760.
 Nixon, P.E. 3510.
 Nixson, G.D. 6717.
 Niyazova, M.M. 8858.
 Njagi, G.D.E. 4684.
 Nkanga, N. 4528.
 Noack, S. 5031, 7729.
 Noble, P.J. 3430.
 Nobles, R. 1690, 1806, 1812.
 Nobuch, A. 2359.
 Noda, K. 2913.
 Noe, B.L. 1041.
 Noethel, H. 7042, 8649, 8650.
 Nogge, G. 5173.
 Noguchi, H. 1851, 5336.
 Nogueira, R.H. 4456.
 Noirot, C. 6998.
 Noirotin, C. 4546.
 Nolan, J. 3448.
 Nolan, R.A. 1030, 5026, 5798.
 Nolen, T.G. 2529.
 Nonveiller, G. 3949.
 Noonan, G.R. 7585.
 Noor, A.

- Paik, W.H. 6459.
Pain, J. 225, 4647, 8272.
Pain, E.J. 6907.
Paine, G.D. 3672.
Paine, T.D. 2228.
Pain, S.D. 1102, 6168.
Paiva, M.R. 9302.
Pajm, H.R. 1613, 7172, 7449.
Pajot, F.-X. 3689, 5573, 9237.
Pajot, E.J. 686.
Pajunen, V.I. 4265, 6004, 8288.
Pak, G.A. 7422, 7424.
Pak, T.P. 9250.
Pak, W.L. 1740.
Pal, R. 2861.
Pal, S. 7306.
Pal, S.G. 328, 9034.
Pal, T.K. 519, 7161.
Palacios-Vargas, J.G. 2167, 4820, 8781.
Palacios, M. 3824.
Palani, G. 663.
Palevody, C. 3504.
Palframan, L. 6300.
Palival, Y.C. 6611.
Palika, J. 4962.
Pali, B.S. 1242.
Pallesen, G. 5515.
Palmer, C.A. 7122.
Palmer, J. 5815.
Palmer, T. 3941, 3950, 4424, 4787.
Palma-Villa, G. 2706.
Palma, R.L. 512.
Palmer, D.A. 8573.
Palmer, J.M. 1261.
Palmer, J.O. 5087.
Palmer, M. 6234.
Palmer, M.K. 8383.
Palmer, W.A. 2692, 5279.
Palmgren, P. 4123.
Palmer, A.K. 6633.
Palmonqvist, G. 4714, 4723, 7086.
Palmonqvist, P. 3118, 5494, 7058, 7871.
Pan, Y.-C.E. 4670.
Pan'kov, A.N. 6341.
Panchabhavi, K.S. 6800, 6948.
Pandy, R.S. 3427.
Pande, Y.D. 6473, 6798, 7775.
Pandey, R. 8068.
Pandey, G.P. 7399.
Pandey, K.C. 7688.
Pandey, M. 6625, 7682.
Pandey, N.D. 7672, 8451.
Pandey, S.Y. 7773.
Pandey, U.K. 6625, 7682.
Pang, Y.-Z. 2781.
Pang, Y.S. 8259.
Panhora, B.R. 6076.
Panicker, K.N. 462, 466, 1188, 3525, 3593, 5400.
Panmy, V.A. 3842.
Panis, A. 3611, 3612.
Panuzzi, A.R. 559.
Pant, C. 644.
Pant, J.C. 7680, 7732.
Pant, M.C. 7535.
Pant, N.C. 7348, 7447, 7531, 7536.
Pant, R. 3329.
Panzar, V.F.S. 2958, 3031, 3393, 5400.
Papathanou-Souloutis, P. 2486.
Pape, D.J. 1830.
Papierok, B. 2621, 6608, 8509.
Papillon, M. 4120.
Papp, C.S. 7940.
Papp, J. 2449, 3157, 8687.
Papp, S. 5440, 6872, 7969.
Papp, R.P. 1961.
Paquin, R. 1049.
Paradi, E. 7038.
Paradis, R.O. 294, 680.
Paraskevas, M. 3620.
Parth, L. 5060, 5111, 5423.
Parth, L. 5081, 5875, 6242.
Parr, I. 7627.
Parnenov, G.P. 1108.
Parth, I.A. 2772.
Parth, D.R. 6210, 7700.
Parise, S.G. 6991.
Parkash, R. 8653.
Parker, B.L. 5386.
Parker, B.M. 8223.
Parker, C.R. 3935.
Parker, F.D. 557, 1965, 2021, 5197, 5880, 6735, 7524, 9101, 9166.
Parker, G.A. 1143.
Parker, G.J. 3303.
Parker, J. 1536.
Parker, K.L. 5488.
Parker, L.W. 2883.
Parker, M.A. 6063, 4319, 7556.
Parker, N.J.B. 2259.
Parkin, D.J. 6255.
Parkinson, D. 2796.
Parkman, P. 1149.
Parnalee, R. 2883.
Parman, V.R. 8561.
Parrington, S. 3849, 5159.
Parr, R. 4676.
Parrilla, M.P. 4083, 4916, 8219.
Parrish, M.D. 6326, 9200.
Parrott, W.L. 8868, 9352.
Parsad, B. 7544.
Parsons, P.A. 5443, 5490, 5496, 5695, 8075.
Parsons, R.E. 1831.
Parrington, S. 295, 317.
Partridge, L. 5056.
Paruri, P. 4001, 7179, 7184.
Parveen, T. 3650.
Pascard, C. 8087.
Pascual, F. 1567.
Pastchnick, M. 5438.
Paskewitz, S.M. 5092, 7462.
Pasqualini, E. 2889, 4166, 6953.
Pass, B.C. 1277.
Pass, G. 5674.
Pass, H. 5535.
Pastels, J.J. 5896, 7210.
Pastels, J.M. 255, 3348.
Pasteur, N. 3919.
Pastor, S. Jr. 2946.
Pastorok, R.A. 2001.
Patana, R. 3371, 4173, 8023.
Patel, B.H. 6672.
Patel, J.R. 7683.
Patel, N. 1466.
Patel, N.Y. 983, 4153, 8155.
Patel, R.C. 7683.
Patel, R.K. 1170.
Patel, S.N. 7675.
Paterson, D.R. 1233.
Paterson, G.D. 4090.
Paterson, H.E.H. 6669.
Pates, J. 2940.
Pathak, P.K. 522, 4082, 6199, 8537.
Pathummalbee, S. 5084.
Pathummal, S. 3034.
Patil, A. 5376.
Patil, B.V. 5366, 9100.
Patil, R.B. 290.
Patil, S.P. 4934.
Patil, S.D. 9081.
Patil, N.C. 1117.
Patil, J. 80.
Patil, D.R. 3325.
Paterson, J.J. 1756.
Paterson, J.L. 5688, 8100.
Paterson, M. 2997.
Paterson, R.S. 1176, 6903.
Patt, A.F. 4170.
Patt, J. 3722.
Patt, J.H. 594.
Paul, J. 6318.
Paulov, S. 682.
Paulovova, J. 682.
Paulsen, R. 8919.
Paulson, D.R. 3362.
Pauly, A. 5597.
Paumard, S. 3879.
Pavan, R.D. 5626.
Pavani Kumar, T. 154.
Pavan, O.H. 1826.
Pavlov, D.S. 9047.
Pavlovic Sazonov, A. 6648.
Pawar, A.D. 2159.
Pawar, C.S. 7403, 7770.
Pawar, V.M. 7391.
Pawlowski, J. 16.
Payment, P. 8007.
Payne, C.C. 270, 272, 2619, 7363, 8449.
Payne, G.T. 4226, 8201.
Payne, K. 5886.
Payne, R. 3293.
Payne, S. 6788.
Payne, T.L. 3788, 4313, 5006.
Peacock, J. 2353.
Peacock, A.J. 4994.
Peacock, E.R. 7948.
Peairs, F.R. 3751.
Pearse, F.K. 3925.
Pearson, B. 3217, 6280.
Pearson, D.J. 5689.
Pearson, D.L. 4346, 5888.
Pearson, J. 8492.
Pearson, J.F. 3568.
Pearson, W.R. 4661.
Peckham, L.L. 2367.
Pech, S.B. 2771, 5439, 8702, 9498.
Pech, D.J. 5845.
Pedell, J. 331.
Pedersen, E.F. 8953.
Pedersen, E.T. 5514.
Pederson, T. 8623.
Pedigo, L.P. 2164, 3781, 6145, 6939.
Pedin Tadel, W. 4693.
Pederas-Macedo, J.H. 7722.
Peferon, M. 4160.
Pegram, R.G. 1309, 6067.
Peichen, L. 9410.
Peigler, R.S. 2106, 4895, 5247, 7508.
Peisalmu, M. 5242.
Peikari, A. 4871, 7893.
Pekrul, S. 885.
Pelecanos, M. 2315.
Pelleg, B.A. 6642.
Pelhate, M. 3280, 5054, 5801, 8182.
Pelhsson, A. 2326.
Pell, P.E. 6258.
Pellgren, M. 1537, 9392.
Pelliccia, M. 8179.
Pelouquin, J.J. 860.
Pemberton, G.W. 3115.
Pemberton, J.R. 8433.
Pena, J.E. 4555.
Pence, D.B. 3685.
Penchenier, L. 4080, 4242.
Pence, N.L. 3566, 6106, 6169.
Pendland, J.C. 1826, 4208, 5747.
Pendrel, B.A. 749.
Penev, I. 9288.
Pent, W.K. 1748.
Peng, Y.-S. 2897, 5997.
Pennan, D.R. 1111, 4071, 6944, 9300.
Penny, D.N. 4057.
Penny, N.D. 4015, 4054, 4055, 4056, 4862, 6490, 7235.
Pentrose, R.L. 3762, 5981.
Pentecade, C.H.S. 498.
Pentecade-Dras, A.M. 8873, 8888, 8916, 8917.
Penzlin, H. 200, 5674.
Pepe, I.M. 8919.
Peray, J. 1026, 4196.
Perera, W.T.H. 4621.
Perera, S.M.F. 5481.
Perelle, I.B. 1545.
Perera, J. 6241.
Peres, J. 5029.
Peretz, T.M. 2387, 7144.
Peretz, S. 3076.
Perissany, K. 2693.
Pericart, J. 1636, 4855, 8804.
Peries, I.D. 6485.
Peris, L.D.R. 6151.
Periquet, G. 5067.
Perrin, P.D. 4779, 4782, 4930, 6356.
Perkins, W.D. 2491.
Perli, S. 7631.
Peromidi, A.L.P. 8242.
Perraju, A. 7452, 7467.
Perret, J.L. 5206.
Perrin, W.M. 1473, 4588, 8549.
Perron, J.-M. 1049.
Perrone, J.B. 5488.
Perry, A.E. 7604.
Perry, A.S. 1064.
Perry, D.H. 836.
Perry, R. 3854.
Perrys, B. 1310.
Persson, M. 3334.
Pescador, M.L. 5575, 7976.
Peschken, D.P. 2952, 3805.
Pesson, B. 8882.
Pessotti, I. 5121, 5123, 6688.
Petaj, J. 8380.
Peter, H.U. 7584.
Peter, M.G. 968.
Peters, D. 1823.
Peters, J.F. 6795.
Peters, L.L. 5771, 9024.
Peters, T.M. 29, 1645, 2416, 5653, 8035.
Peters, W.L. 3166, 3206, 5575, 7976.
Petersen-Braun, M. 3838.
Petersen, G. 4664.
Petersen, J. 2616, 1438, 2199, 4078, 5181, 7666, 8857, 9141.
Petersen, J.L. 8062.
Petersen, M. 4970, 8218.
Petersen, N.S. 1498, 8634.
Peterson, B.V. 3252.
Peterson, J.J. 3614.
Peterson, N.E. 625.
Peterson, R.D. 11206, 8212.
Peterson, S.W. 2624.
Petit, F.L. 8543.
Petkov, N. 9427.
Petney, T.N. 1922, 5939.
Petraila, A. 4324, 5154.
Petre, Z. 2635.
Petri, W.H. 2350.
Petris, A. 8938.
Petrova, N.A. 2407, 5467, 9405.
Peters, R.M. 7447.
Petty, G.J. 5405.
Pezzoli, C. 3503.
Pfeiffer, G.E. 6050.
Pfaffenberger, G. 3581, 4932.
Pfannmuller, L.A. 5125.
Pfau, H.K. 7302.
Pfeffer, A. 8763.
Pfister, H. 1025.
Pflehsinger, J. 3306.
Pflieger, H.-J. 6533.
Pflieger, H.J. 890.
Pflieger, J.H. 910.
Pflumm, W. 5869.
Pflummer, T.R. 614, 693, 3012.
Phadke, K.G. 7776.
Pham, J. 8771.
Pham, M.H. 8272.
Phanthumachinda, B. 5846.
Phatak, S.C. 8529.
Phelan, P.L. 7343.
Phelps, R.J. 1997, 9228.
Philip, B.M. 1805, 1815.
Philip, R.N. 1006, 1332.
Philo, J.A. 8493.
Phillips, C.E. 8909.
Phillips, D.R. 2515.
Phillips, D.W. 6734.
Phillips, J. 2132, 2883.
Phillips, J.E. 231, 8931.
Phillips, J.M. 4588, 8549.
Phillips, J.P. 9419.
Phlogene, B.J.R. 3241, 8970.
Phokela, A. 2560, 4996.
Piat, J. 2660.
Piccardi, P. 4166.
Pico, A.M. 5730.
Pichot, J. 1571.
Pichot, J. 1571.
Pichens, L.G. 1314.
Pickett, J.A. 212, 5115, 5292, 6979, 8563.
Piccoli, N. 563.
Pigore, C. 4215, 4217, 5768.
Pienkowski, R.L. 371, 6046, 8470.
Pieragostini, E. 1508, 5451.
Pierce, H.D. 515.
Pierce, H.D. Jr. 1776, 4352, 5704.
Pierce, N.W. 7677.
Pierce, R. 2976, 7338, 9341.
Pierotti, K. 3981.
Pierre, J. 1658.
Pieron, J.W. 6875.
Piesman, J. 635, 8422.
Pieters, E.P. 3429, 4227, 6191, 8172.
Pik, E.M. 7916.
Pikras, P. 1737.
Pikras, R. 9324.
Pigal, M.C. 941.
Pigon, A. 8652.
Pigon, A.W. 4952.
Pijacker, L.P. 6266.
Pikras, E.M. 2158.
Pilipuk, V.I. 6439.
Pillai, G.B. 6761.
Pillai, S.J. 4211, 5732, 6150.
Pillai, K.S. 4443, 4620.
Pilon, J.G. 7025.
Pimentel, D. 873.
Pimley, R.W. 1751, 8089.
Pimpinelli, S. 2317.
Pimprikar, D.D. 1041, 5773.
Pinnamoni, S. 8938.
Pinschin, R. 5000, 5089, 8437.
Pines, M. 395.
Pinger, R.R. 3196, 9270.
Pinheiro, F.P. 625.
Pinhey, E. 7107, 7236, 7237, 7906.
Pinho de Castro Silva, E. 9082.
Pinnell, R.E. 3450.
Pintan, H. 9410.
Pinsker, W. 3928, 7061, 9394.
Pintera, A. 6737.
Pinterova, J. 6894.
Pinto, J.D. 4021, 5562, 5953, 8820.
Pinto, L.G. 8289.
Pintureau, B. 197, 1077, 2455, 2558.
Pipa, R. 4663.
Pipano, E. 6607.
Pires, C.A. 1271.
Piron, P.G.M. 3704.
Pirone, T.P. 3416.
Pirrotta, V. 6241, 9397.
Pisarski, B. 8678.
Pitman, R.L. 5140.
Pitman, R.M. 7292.
Pitre, D. 294, 680.
Pitre, H.N. 445, 1273, 3035, 6031.
Pita, A. 9419.
Pittino, R. 7171.
Pittino, D.L. 4227, 8172.
Pivar, G.A. 3938.
Piyakarnchana, T. 2853.
Pjanic, E. 6817.
Pla, D. 8784.
Pla, E. 1761.
Plachy, J. 6894.
Plagens, H. 3306.
Plakidas, J.D. 5182, 6020.
Plan, W.D. 246, 4995.
Plapp, F.W. Jr. 4688, 8197, 8651.
Plasmann, E. 811.
Plateaux-Quenu, C. 4462, 5078, 5422.
Plateaux, L. 3373, 4462, 4648, 5078, 5422.
Platner, G.R. 4021, 4867, 8820.
Platnick, N.I. 1568, 3548.
Platzer, E.G. 2168, 3661.
Plavcan, K.A. 1054.
Platzer, E.G. 6612.
Plessants, J.M. 2059, 6822.
Plechanov, G.F. 6702.
Pleshkova, G.N. 7855.
Pleshkova, G.N. 7855.
Plevako, N.G. 7855.
Plimmer, J.R. 1383, 1788.
Plowman, K.P. 2881, 2900, 4472.
Plowright, R.C. 499, 5195, 8346, 9366.
Plumb, R.T. 2618.
Plummer, J.A. 605.
Plummer, M.R. 2515.
Plus, N. 1025, 1032, 5471.
Poddar, S. 6943.
Poddar, S.C. 4416, 7111.
Podgore, J.K. 4507.
Podgore, J.K. 4507.
Podgore, J.K. 4507.
Podoler, H. 2166, 9178.
Podsiadlo, E. 9138, 9467.
Poe, S.L. 1869, 3726.
Poehlman, J.M. 9293.
Poggio, T. 140, 412, 912.
Pohlman, K. 1350.
Polhronetzky, K. 709.
Poinar, G.O. Jr. 599, 4202, 5539, 5728, 9213.
Poitout, S. 1861.
Poitry, S. 183.
Poivre, C. 4822, 7883.
Pokorny, K.S. 3655.
Polevny, N.I. 9241.
Polhemus, I.T. 6416.
Polhemus, D.A. 6416.
Polhemus, I.T. 3208.
Polizhar, H. 1345.
Poljanec, S. 135.
Pollack, R.J. 2494.
Pollard, E. 2354.
Pollard, G.V. 737.
Pollard, S.D. 6756.
Pollo, Zorita, M.A.L. 7078.
Polonsky, J. 2660.
Polson, C.D.A. 4239.
Pomeroy, N. 9366.
Poncellet, C.G. 4358, 8544.
Ponomarenko, V.Y. 1534.
Ponot, A.C. 822.
Ponzo, F. 2158.
Poonayathorn, P. 4568.
Poore, D.M. 5318.
Pops, A. 4599.
Pope, D.N. 3600.
Pope, M.M. 4913.
Pope, R. 4663.
Popekovic, D. 1413.
Popham, E.J. 5564.
Popov, A.V. 2759.
Poppe, D.M.C. 5160.
Por, E. De Laever 2666.
Poras, M. 3481.
Porcherson, P. 205, 3341, 4120, 4163.
Port, C.M. 3023.
Port, G.R. 3658.
Porte, A. 4192.
Porter, C.C. 1646, 1975, 2368, 2369.
Porter, K. 6703.
Porter, S.D. 2005, 2282, 5915.
Portin, P. 3101.
Portus, M. 575.
Post, D.C. 1801, 5015, 5717, 6984, 8115.
Post, R.J. 5457.
Postell, F.J. 8363.
Postiglioni, A. 1514.
Postlethwait, J.H. 5095.
Potgieter, D.J. 1070.
Potgieter, F.T. 2169, 6064, 8420.
Potrikus, C.J. 3574.
Potter, D.A. 1971, 2248, 3773.
Potter, J. 5132.
Potter, J.E. 2153, 6782.
Potter, M.F. 1862.
Potter, S.S. 4669.
Pough, F.H. 1293.
Pough, S. 176.
Poulard, L. 7640.
Pouzat, J. 5824.
Pouzat, D. 6444, 6595.
Powell, D.F. 2263, 3922, 6205, 6896.
Powell, J. 1149.
Powell, W. 1228.
Prabhu, N.R. 5390, 5251, 5261.
Pradnand, R. 6515.
Prager, J. 4134.
Prakash, M.M. 7479.
Prakash, N. 7711.
Prasad, D. 7389, 7561, 7702, 7734.

Author Index

- Prasad, E. A. V. 3844
Prasad, H. H. 7355, 7356, 7359, 7448
Prasad, H. M. 7358
Prasad, J. 2301, 7468
Prasad, M. 6512
Prasad, O. 4180
Prasad, R. 7396
Prasad, S. K. 295
Prasad, V. G. 1836, 7698
Prasad, Y. K. 7776
Prasada Rao, U. 5407
Prasitkum, C. 6135
Pratt, O. 2537
Pratt, C. 5992
Pratt, G. E. 2590
Pratt, G. F. 6550
Pratt, G. K. 2239
Pratt, J. E. 2964
Pratt, R. G. 8524
Preati, A. A. C. M. 6034
Pree, D. J. 2655, 8501
Preiser, F. A. 4214
Premechand, A. 7389
Premkumar, T. 6946
Preobrazhenskaya, G. V. 6245
Presada, W. A. 4540
Presidente, P. J. A. 6776
Presley, J. M. 5444
Press, J. W. 1227
Prestige, R. A. 3547
Preston, A. F. 3587
Preston, R. B. 3159, 3931
Prestwich, G. D. 253, 1054, 1566, 2609, 3380, 3383, 6215, 6568, 8933
Prestwich, K. N. 5021, 5672
Prestorius, N. H. S. 5039
Prevosti, A. 1578, 9378
Prewitt, J. C. 609
Price, M. A. 3112
Price, M. V. 1291
Price, N. R. 1044
Price, R. D. 85, 6448
Price, S. B. 7618
Pridantseva, E. A. 9054
Pridhodko, I. N. 8812
Pringle, J. 3274
Primolo, G. L. 1649, 2029, 8822, 8824
Pritchard, G. 4145, 4249
Pritchett, D. W. 1749, 4201, 5742
Pritzl, G. 4783
Proeve, H. 8106
Procurer, J. D. 5456
Prokopy, R. J. 1920, 2156, 3353, 3639, 4136, 5046, 5131, 5850, 6108, 8971
Prola, C. 3143, 7116
Propp, G. D. 5927
Proshold, F. I. 8213
Proskuryakova, A. M. 9374
Prosser, L. 5451
Proszynski, J. 8734
Prout, M. 9086
Prout, T. 3127, 6814
Proverbs, M. D. 3815, 8440
Provine, R. R. 5070
Provisola, A. V. 4846
Proszek, L. 1070
Pruad'homme, N. 1538
Pruadhomme, J.-C. 8112
Pruess, K. P. 710, 9120
Pruzan-Hochkiss, A. 397, 1545
Pryor-Jones, O. E. 786
Przyorka, Z. 8940
Puckkov, A. V. 6919
Puckett, D. 2830
Pucyo, M. T. 7837
Pussagur, C. 3110
Pulawski, W. J. 8828
Pulley, P. E. 1278, 1891
Pulley, J. K. 1032
Pun, J. S. K. 982, 8991
Punchihewa, R. K. W. 8267
Pupedis, R. J. 1710, 4965, 8885
Purcell, P. G. 263
Purcell, A. H. 4191
Pun, M. K. 5337
Purich, G. S. 5302
Purnell, R. E. 3682
Purnu, K. 5726, 5756, 8124, 8113, 9002
Purvis, G. 5234
Putnam, J. F. 1070
Putter, G. J. 3761
Putz, V. 7099
Putter, I. 4214
Puttler, B. 508
Py-Daniel, V. 3995
Py, J. P. 4375
Pyke, G. H. 4345, 4469
Pyle, R. M. 2119, 2147
Ohan, J. Q. 3197
Oiao, C.-L. 4230
Oiu, H.-G. 1218
Oiu, Y. 7
Qu, P. 2780
Qu, X.-M. 8952
Quadrato, J. A. 4865
Quattlebaum, W. F. 9425
Quentin, R. M. 1602
Quesada Allue, L. A. 5587
Quick, M. P. 646
Quick, D. L. J. 7215, 7277
Quickenberry, K. L. 6149
Quillever, D. 9249
Quillen, M. C. 4188
Quimby, P. C. Jr. 3550
Quimby, P. C. Jr. 303
Quinlan, R. J. 314
Quinn, W. G. 427, 8647
Quintero, D. J. 2388
Quintero, E. 7660
Quintero, T. C. 7643
Quisenberry, S. 2069, 2086, 2087
Qureshi, I. A. 9488
Raabe, M. 3496
Raana, K. 1902
Raananen, M. 2220, 5299
Rabaglia, R. J. 1596
Rabasse, J. M. 7760
Rabb, R. 2862
Rabb, R. L. 349, 367, 600, 1166, 1864, 6005
Rabbings, R. 725
Rabello, E. X. 4498, 9223
Rabillon, J. 3568
Rabin, J. 2151
Rabinowitz, D. 2047
Rabson, M. S. 2238
Raccab, B. 5346, 8467
Raccurt, C. 656
Raccurt, C. P. 4516
Raccus, J. 8000
Racheli, T. C. 3143, 7116
Rachman, N. J. 7296
Racopio, J. V. 1763, 4391
Radcliffe, E. B. 6209
Rade, B. J. 6074
Radice, C. D. 4269, 5849
Radovic, I. T. 93
Radovsky, F. J. 10
Radwan, Z. 9190
Rae, M. C. 3682
Rae, P. M. M. 8624
Rafael, J. A. 1132, 4426, 4493
Rafaeli, A. 2613, 3370
Rafalski, J. 7150
Raff, E. C. 394, 3066
Raff, R. A. 394, 3066
Raffa, K. F. 4303, 6186, 8473
Ragab, Z. A. 6971, 6978
Rage, D. R. 2755
Raghavan, K. V. 1770
Ragsdale, D. W. 607
Rahalkar, G. W. 7454
Rahim, M. A. 3013
Rahman, M. 1246, 1247
Rahman, M. A. 9057
Rahmann, R. 100
Rai, S. K. 9440
Rai, S. 7756, 7780
Raikhal, A. S. 5088
Raana, A. K. 1100, 1908, 4563, 4565, 4983, 5842
Rajagopal, D. 4347, 5374
Rajagopalan, P. K. 319, 462
Raj, G. 643, 654, 1188, 1360, 6287
Rajamanickam, C. 5947
Rajanna, C. 5255, 5368
Rajapakse, R. H. S. 4532, 8453
Rajapakse, R. S. 677
Rajaram, K. P. 1847
Rajavelu, G. 2041
Rajendran, B. 6650
Rajendran, S. 1074, 5763
Rajeswari, B. 657
Rajgopal, S. 4364
Rajotte, E. G. 5411
Rajput, B. 4671, 9389
Raju, B. C. 6597
Rakovic, M. 2395
Rallo, G. 3997
Raim, R. C. 6180
Raimacher, P. R. 4529
Ramanachandran, P. 432
Ramanakshnan, N. 275, 7384, 8439
Ramanakshnan, V. 2561
Ramanalingam, S. 2861
Ramanamurti, P. S. 4271
Raman, A. 3615
Raman, K. V. 3824, 6140
Ramaswamy, G. 1439, 6214
Ramarao, B. 7413
Ramasubrahman, K. 7771
Ramaswamy, S. B. 905
Ramaswamy, S. B. 2744, 3753
Ramabjan, J. 690
Ramdev, Y. P. 7412
Ramei, C. 7048
Ramesh, S. 9258
Ramrez, D. A. 4484
Ramrez, W. 6781
Ramuro, Z. A. 6158
Ramos, H. C. 1271
Ramsey, J. M. 9281
Ramos, P. 9281
Ramoska, W. A. 1382, 3422, 6149
Ramsamy, M. 46
Ramsey, G. W. 2171
Ramsey, H. P. 8343
Ramsey, R. 1731
Rana, B. S. 4566, 7784
Ranade, D. P. 5521
Ranade, D. R. 9036
Rand, K. A. 7292
Randall, J. H. 9122
Randall, M. G. M. 4371
Ranganath, H. A. 6265
Rangaswamy, H. R. 5109
Rangel, E. F. 5089
Rannia, M. K. 7009
Rank, G. H. 4603, 4921, 8230
Rankin, G. D. 9143
Rankin, M. C. 4981
Ranta, E. 1258, 4476, 4480, 6830
Rantanen, T. 3691, 4485
Rao, B. H. K. 6947
Rao, K. H. 160
Rao, K. M. 782
Rao, N. G. P. 4566
Rao, N. V. 6947
Rao, P. J. 7412
Rao, P. K. 1593
Rao, R. S. N. 6926
Rao, U. P. 5404
Rao, V. L. V. P. 6947
Rao, Y. R. 1217
Rao, Y. S. 1217
Rapidly, M. 8765
Rapsarda, V. 2829, 6773
Rapp, J. K. 2047
Rappaport, N. 5782
Rao, N. G. P. 4566
Rashid Rathor, H. 8872
Raske, A. G. 8692
Rasmussen, R. L. 2148, 7606
Rasmy, A. H. 6976
Rasnis, A. A. P. 744, 6636
Rasnick, J. 7271
Rasnikov, M. 98
Ratanaworahhan, N. C. 26
Rataui, H. S. 7746
Ratcliffe, B. C. 4109, 4801, 7950
Ratcliffe, R. H. 65, 1399, 4607, 9348
Ratth, B. J. 2047
Rathor, H. R. 234
Rathor, H. R. 1015, 1902
Rathore, R. S. 5401
Rathore, Y. S. 617
Ratnam, M. 547
Ratner, S. S. 8076
Ratt, P. 8776
Rautsion, J. R. 4221, 8667
Rauscher, M. D. 2072
Raven, J. R. 2389
Rawash, I. A. 360, 1038, 1042, 7330
Rawat, R. R. 1242, 6767
Rawlings, P. 5979, 9430
Rawlins, J. E. 6846
Rawlinson, S. C. 293, 8497
Raworth, D. A. 2866, 2869, 2871, 2880
Ray, A. 4271
Ray, C. H. Jr. 4097
Ray, D. F. 4729
Ray, R. T. 3571
Raybould, J. N. 869
Raychaudhuri, D. 6513, 8688
Raychaudhuri, D. N. 1642, 4416, 4417, 4530, 4554, 4734, 6513, 6843, 7111, 7151, 7846, 8688, 9338, 9487
Raychaudhuri, S. P. 7652
Raychaudhuri, D. 2378
Raymond, H. L. 9113
Raymond, J. D. 3107
Razowski, J. 8903
Read, R. W. F. 6298
Readshaw, J. L. 1264
Ready, N. E. 6521
Ready, P. A. 59
Ready, P. D. 59, 5573
Reagan, P. D. 3291
Reagan, T. E. 1430
Read, L. A. 2049
Reardon, R. C. 2953, 8472
Reavy, B. 982, 1032, 8990
Recco-Pimentel, S. M. 7844
Recco, S. M. 760
Rechav, Y. 673, 1367, 5030, 5486
Reckberg, K. E. 4369
Reddy, D. W. 5601
Reddy, D. W. 5257, 5365, 5378, 5425
Reddy, D. V. R. 6909
Reddy, G. 7856
Reddy, M. S. 6909
Reddy, M. V. 1405, 4447, 5428, 7802
Reddy, P. S. 6947
Redfern, C. P. F. 3305, 3511, 5462
Redfern, R. E. 2582, 5786
Redlinger, L. M. 2241, 8535, 8545
Redmond, B. L. 84, 2505
Redner, J. H. 802
Redsell, C. A. 571
Reed, G. R. 7049
Reed, C. 5344, 9048
Reed, D. D. 683
Reed, D. K. 2231, 8142
Reed, G. L. 2231, 3780
Reed, H. C. 1268, 3078, 6220, 9357
Reed, T. 299, 4371
Rees, D. A. 8711
Rees, H. H. 211
Rees, N. E. 5993, 6027
Reese, G. A. 2007
Reesk, J. C. 483, 2212, 5294
Reeves, R. M. 4085
Reeves, W. C. 9280
Regier, J. C. 5825
Regnander, J. 719
Regmire, J. 367, 600, 1864, 2862, 6141, 8285
Reichardt, W. 140, 412
Reichart, C. V. 5880
Reichel, W. L. 1831
Reichle, K. F. 3417
Reichmuth, C. 9031
Reid, D. G. 1264
Reid, P. W. 3396
Reid, P. W. 190
Reisen, D. A. 359
Reis, W. O. 6907
Reimer, N. J. 6491
Reincke, J. P. 1706
Reinert, J. A. 722, 8191
Reinert, J. F. 6410, 7677
Reinham, C. 1003
Reinhardt, C. A. 341
Reinhardt, R. 7419
Reinrich, A. 82, 1723, 1724
Reisen, W. K. 739, 1296, 1902, 2111, 3650, 6697, 7602, 9073
Reisnick, J. 1963
Reisman, R. E. 3686
Reissig, M. 5488
Reissig, W. H. 5391, 6111, 6122, 6162, 8200
Reiter, P. 6185
Reith, W. 3351
Reinhardt, M. 9182
Reinhardt, C. 2622, 4863
Reinhold, H. 176, 177
Remington, M. P. 3756, 6101
Remund, L. 7252
Remy, C. 901
Ren, S. N. 1114
Ren, Y. 5288
Renard, M. 4582
Renaud, A. R. 1859, 1994
Renner, J. 4483
Renkawitz-Pohl, R. 4664
Renobales, M. D. 954
Renou, M. 228
Rensing, L. 4082
Renwick, J. A. A. 4269, 5132, 5849
Renz, A. 2634
Resh, V. H. 3862, 5429, 7812
Reshmetnikov, I. A. 9227
Resnick, N. C. 3433
Resny, D. F. 4729
Resoschauer, A. 6596
Retnakaran, A. 3791, 6959, 7922
Rettsch, F. 2930, 9027
Reuben, R. M. 663
Reum, L. 58
Reunala, T. 3691, 4485
Reuska, J. 6648
Revelante, P. 9470
Revina, T. A. 8939
Reynolds, C. O. 2508, 9115
Rey, J. R. 3622, 5241, 5264, 6833
Reyes, J. L. 3810
Reynolds, H. T. 9290
Reynolds, S. E. 7283
Reynolds, T. B. 1487
Rezk, G. N. 6771, 6971, 6978
Reznik, N. A. 9398
Reznik, S. Y. 405
Rheinlaender, J. 5863
Rheubert, M. B. 4116, 8910
Rhodes, R. H. 2818, 4628
Rhodes, H. A. 6201
Rhodes, L. F. 8199
Riasol Boxart, J. M. 8164
Riba, G. 8130
Ribble, D. W. 5601
Ribeiro, A. F. 2543
Ribeiro, H. 1271
Ribeiro, J. M. 3385
Ribeiro, J. M. C. 1882, 7361, 8963
Ribeiro, R. D. 5022, 5283
Ribi, W. 4961
Ribi, W. A. 6525
Rice, A. D. 6954, 6979
Rice, E. R. 3777
Rice, M. E. 8698
Rice, M. J. 6530
Rice, E. 1783
Rice, S. E. 5949, 8489
Richard-Mercier, N. 7427
Richards, A. G. 1720, 8056
Richards, G. 2320
Richardson, C. G. 1460
Richardson, J. 4191, 8488
Richardson, J. C. 8215
Richardson, J. D. 8514
Richardson, P. N. 3027
Richardson, R. H. 3007, 5446, 5453
Richardson, R. J. 6840
Richardson, J. V. 3788, 4313
Riches, H. R. C. 6616
Richman, D. H. 5867, 8284, 8731
Richmond, C. 2731
Richmond, R. C. 1839, 7474
Rieker, D. W. 6722, 8353
Rieckoll, W. L. 1872
Rieck, M. J. 1067
Ridolfi, L. M. 1790, 3500, 3518, 3519, 4583
Riddle, W. A. 1097, 6028
Ridland, P. M. 2854
Ridleyhuber, K. T. 6858
Ridout, B. V. 7252
Ridout, L. M. 3652
Ridwell-Smith, T. J. 1308, 7609
Ries, D. E. 2980
Riemann, J. G. 9808
Rieske, E. 250
Rietschel, G. 83
Rietschel, P. 8865
Rigby, J. R. 5317
Richter, V. A. 6397
Riles, E. G. 4740
Riles, J. 721, 7108
Riley, T. J. 7444
Rimet, M. 6212
Rincker, C. M. 4317, 8395
Rincker, T. E. 51, 475, 452, 1070, 1754, 4122, 8300, 8585, 8593, 8594
Rindge, F. H. 7921
Rimer, J. C. 1683
Ring, D. 456
Ring, D. R. 2265
Ring, J. 848
Ring, R. A. 8908, 8103
Ringler, N. H. 2131
Rings, R. W. 2685, 5124
Riordan, A. J. 5978
Riordan, J. C. E. 4756, 4895, 7232
Ripin, A. B. 9148
Ripoll, P. 3063
Riscu, W. 2513
Risch, S. 2993
Risch, S. J. 2211
Rish, N. D. 1641
Rishkesh, N. 664
Riska, B. 71
Rissing, S. W. 2145, 2805
Risch, S. S. 4214
Ritcey, G. 6143
Ritchie, A. J. 1645
Ritchie, J. M. 1077
Ritchie, S. A. 1198
Ritte, U. 1980
Ritter, K. S. 6690, 5744
Ritter, W. 2971, 8590
Ritz, R. 5173
Ritzmann, R. E. 4128
Riviera, C. 5037
Riviere, F. 4503
Rizza, A. 531
Roach, S. H. 2247
Roback, S. S. 3236, 4107
Robacker, D. C. 5972
Robacker, K. M. 6554
Robb, K. L. 4083
Robbins, J. C. 3485
Robbins, L. G. 6256
Robbins, M. L. 1834
Robbins, R. C. 6777
Robbins, R. K. 2786
Robbins, W. E. 987, 2176
Robel, R. J. 608
Robert, A. 3496
Roberts, B. 919, 2717, 3361
Roberts, C. J. 127, 130
Roberts, D. 4314

- Roberts, D.B. 368, 2564, 3502, 3917.
Roberts, D.W. 404, 8161.
Roberts, E.A. 5006.
Roberts, I.M. 276.
Roberts, L.W. 4515.
Roberts, R.B. 6326, 8480, 8969, 9074, 9200.
Roberts, R.H. 744, 1401, 4419, 6203, 8403.
Roberts, S. 3901.
Roberts, S.J. 5626.
Robertson, G.M. 1333.
Robertson, H.M. 6667, 6669, 8614.
Robertson, J.L. 2724, 2954.
Robertson, J.E. 4229, 4615, 8202, 8207, 8542, 8658, 9031, 9321.
Robertson, L.N. 729.
Robin, V.Y. 636.
Robinson, A.S. 2331, 9404.
Robinson, F.A. 4636.
Robinson, G.E. 1315, 6206.
Robinson, G.S. 4057.
Robinson, J.F. 1890, 3013, 6099, 6100, 6129, 8851, 9306.
Robinson, J.V. 1959.
Robinson, M.H. 5847.
Robinson, N.L. 8062.
Robinson, P.J. 1196, 8968.
Robinson, W.H. 2000, 2415, 3527, 3645, 8014.
Robinson, W.S. 1237, 1414.
Robles, C. 8602.
Robles, D. 3858.
Roch, J.P. 3606, 4941.
Rochow, W.F. 4195, 8468.
Rock, G.C. 588.
Rockenbach, P.G. 8153.
Rockett, C.L. 1951.
Rockstein, G. 1766.
Rodakis, G.C. 4656, 8630.
Rodriguez, P.D. 1633, 4856, 4965.
Rodriguez Caabero, F. 8047, 8334.
Rodriguez Cadenas, J.A. 8192, 8333.
Rodriguez, D. 494.
Rodriguez, J.G. 4358, 8544.
Rodriguez, J.P. 6012.
Rodriguez, K. 3432.
Rodriguez, V.M. 6222.
Roodwell, B.J. 8983.
Roeder, A. 8059.
Roelzer, H. 968.
Roelofs, W.L. 214, 219, 420, 1453, 1772, 1782, 1783, 2244, 3349.
Roemer, H. 5663.
Roennau, K.C. 4175, 5713.
Roepstorff, P. 6520.
Roessler, P.F. 469, 4376.
Roessler, R. 6335.
Roessler, Y. 8009.
Roger, B. 8272.
Rogers, C.E. 2074, 2090, 2201, 5702, 5896.
Rogers, E. 8529.
Rogers, G. 8219.
Rogers, V.E. 685.
Rognes, K. 7971.
Rogoff, W.M. 430.
Rogueda, J. 6596.
Rohacek, D.J. 2417.
Rohacek, J. 7969, 8785.
Rohlf, R.C. 7562.
Roitila, H. 7414.
Roitila, B.H. 4071, 6944.
Rohlf, R. 204.
Rohman, A. 1848.
Roitila, H. 1495.
Roitberg, C.A. 3353.
Roiza-Roiza, D. 3504.
Roland, J. 6536.
Rollins, L. 4275, 5094.
Rolseth, B.M. 7876.
Rolston, L.H. 4853, 5583, 6916, 6936, 8799.
Roltich, W.J. 6863.
Roman, R. 1940.
Romanoschin, A. 6619.
Rommet-Zargib, J. 311.
Rong, Y.-L. 2502.
Ronggen, G. 940.
Rongsriyarn, Y. 6060.
Ronkay, L. 7995.
Roo, P.M. 5316.
Roonwal, M.L. 5369, 7432, 7801.
Rosa, J.A. 665, 3657.
Root, R.B. 2063.
Root, T.M. 119.
Rosas, A. 8450.
Rosario, N.A. 5041.
Roshchik, M. 1503.
Rosicewska, E. 4947.
Rosc, A.E. 521.
Rosc, D. 7923.
Rose, H.S. 1663.
Rose, K. 4732.
Rose, M. 1435, 2456.
Rose, M.R. 3117, 3120.
Rose, R. 4973.
Rose, R.L. 8015.
Rose, R.L. 1134, 2194.
Rose, R.D. 2446, 5177, 5184, 5185, 9178.
Rosenberg, J. 6593.
Rosenberg, L. 7559.
Rosenberger, J.L. 2821.
Rosenthal, G.A. 3436.
Rosenthal, M.D. 5008.
Rosenthal, S.S. 2944.
Rosenzweig, E. 3842.
Roshdy, M.A. 8069.
Roskam, J.C. 7565.
Ross, B. 312, 1069, 7684.
Ross, D.C. 3445.
Ross, H. 1484.
Ross, K. 1983.
Ross, K.G. 4640, 4644, 4645, 8592, 9364.
Ross, M.H. 3248, 6032.
Ross, N.M. 1480.
Rossan, R.N. 5027.
Ross, S. 8263.
Rossi, G.C. 5990.
Rossi, R. 1777, 8096.
Rossi, W. 5990.
Rossignol, P.A. 2583, 7362.
Rossolotto, T.E. 7324.
Roth, J.P. 3606, 4941.
Roth, L.M. 2746, 4903, 5835, 6453.
Roth, M. 2660.
Rothenbuehler, W.C. 3754, 8208.
Rothery, G.E. 5110, 5591.
Rothrock, M.A. 3237, 4629.
Rothschild, G.H. 1581.
Rott, D. 6657.
Rotundo, G. 1932.
Roubik, D.W. 3220, 4409, 5227, 6787, 6985, 9130.
Rougout, P.C. 9471.
Roughley, R.E. 4785, 4789, 8043.
Roughley, R.E. 6012.
Rouland, C. 966, 1116, 1118, 5079.
Roulston, W.J. 3448.
Rounds, H.D. 121.
Roush, R.T. 4688, 8197, 8951.
Rousseau, M. 8503.
Rousseaux, M. 8541.
Rout, M.M. 8038.
Rover, J.S. 3412.
Rowcliffe, C. 5851.
Rowe, D.J. 8219.
Rowe, R.J. 6503, 6701.
Rowlands, D.G. 1058.
Rowley, W.A. 1198, 3438.
Rowton, E.D. 3408.
Roy, A.K. 2232.
Roy, C.S. 7695.
Roy, N.K. 1053.
Roy, P. 9210.
Roy, R.B. 3735.
Roy, S. 5252.
Royama, T. 3638.
Royston, M.E. 7353.
Rozek, M. 4682.
Rozkova, G. 7834.
Rozhon, E.J. 7386.
Rozkosny, R. 4825, 5272.
Rozsa, K.S. 181, 241, 930.
Rubin, Y.L. 1384.
Rubin, G.M. 1494, 1509, 6248, 7836, 9414.
Rubina, M. 3690, 9480.
Rubink, W.L. 2685, 5124, 5235, 9356.
Rubio-Moran, R. 3438.
Rubio, Y. 494.
Rubis, P. 4502.
Rudin, W. 923.
Rudinsky, J.A. 2739.
Rudolph, P. 8649.
Rudolph, J.E. 3066.
Ruebsch, T.K. P. 635.
Ruegg, J.C. 1733.
Ruesnic, W.G. 7728, 8574.
Rufas, J.S. 5465, 7825.
Ruflin, T. 641, 655, 672, 1374, 5287.
Ruflin, Th. 658.
Ruggieri, L. 6223, 6472.
Ruini, F. 3390.
Rumfelt, T. 4743, 6873.
Runte, T. 8899.
Rupes, V. 6894.
Rurangirwa, F.R. 8419.
Rusek, J. 6388, 6486, 8778.
Rush, W.A. 634, 3692.
Russell, C.E. 591.
Russell, C.L. 1688.
Russell, D.J. 1989.
Russell, G.B. 6913, 7463.
Russell, L.K. 7523.
Russell, M. 5907.
Russell, M.A. 1522.
Russell, R.M. 8207.
Russell, W.A. 4625, 9272.
Russo, J. 3144, 7098.
Russo, J. 1707, 4876.
Russo, L.F. 2486.
Russell, J. 6476.
Rust, M.K. 359.
Rust, M.R. 6612.
Rust, R.W. 3153.
Rustagi, K.B. 7197, 7194.
Ruszkowski, A. 9476.
Rutanen, L. 7897.
Ruth, D.S. 6640.
Rutherford, S.L. 6114.
Rutledge, L.C. 6887.
Rutledge, L.R. 407, 4285, 4297, 7496.
Rutledge, F. 4279, 4869, 5216.
Rutz, D.A. 708, 6024.
Ruyokoda, B.D. 4527.
Ryab, L.O. 316.
Ryabinin, N.A. 6341.
Ryan, J.R. 8129.
Ryan, L. 50, 1307, 2936, 7614.
Ryan, M.F. 8264, 7990, 7792.
Ryan, R.B. 2014, 2015, 3028, 5782.
Ryan, R.O. 6564.
Ryazantseva, A.E. 9195.
Ryzman, R.E. 7493, 7644.
Ryzman, L. 8552.
Rye, W.J. 1410.
Ryerne, J.S. 2957.
Ryker, L.C. 2739.
Rytseva, E.V. 9227.
Sabatnelli, G. 1704.
Sabat

- Scholl, C.G. 2208
Scholl, P.J. 590, 2199
Scholtz, C.H. 4954, 9205
Schom, C. 8998
School, A. 4700
Schoolfield, R.D. 2584, 4164
Schoolfield, R.M. 1979, 2695
Schoonmees, J. 5048, 9020
Schouten, A. 2246
Schoonhoven, A.V. 4609, 8578, 9347
Schoonhoven, L.M. 217, 1453, 8294
Schopf, R. 7318, 7696
Schordert, M. 133
Schorer, H.E. 4751
Schro, M. 3448
Schwaller, T.D. 8108
Schwartz, T.D. 2144, 3600
Schreck, C.E. 1364
Schrecke, W. 1352, 4501
Schrennmer, F. 9180
Schroeder, D. 7608
Schroeder, H. 4898, 4890
Schubart, H.O.R. 445
Schubiger, G. 335, 1081, 4246
Schuepbach, T. 3906
Schuette, F. 6859
Schuh, B.A. 2016
Schulte-Elte, K.-H. 5006
Schulte, K.L. 9231
Schultz, G.W. 5859, 5891, 9119
Schultz, R.D. 8432
Schultz, T.W. 188
Schulz-Baldes, M. 936
Schultz-Key, H. 662
Schulz, H. 200
Schulze-Kellman, K. 5228, 9355
Schumann, F.W. 8351
Schurr, K. 5133
Schuster, D.J. 3755, 4402
Schuster, S. 1011, 2643
Schwab, R.G. 2831
Schwalbe, C.P. 5013
Schwan, T.G. 3263
Schwartz, L.E. 5681
Schwartz, J.A. 6862
Schwartz, L.M. 967, 2518
Schwarz, M. 4028, 4033
Schwarzberg, H. 200
Schweitzer, R.D. 3407
Schweitzer, R.F. 7231
Schweizer, P. 1120
Schwemmer, J. 8919
Schwemmler, W. 6748
Schwert, D.P. 791
Schwochua, M. 2333
Scivittaro, A. 6338
Scivittaro, A. 6361, 6369, 7157, 8755, 8747
Scofield, S.R. 8935, 9385
Scopes, G.A. 2494
Scopes, N.E.A. 3023
Scott, R.D. 3759
Scott, W. 280
Scott, G.C. 6133
Scott, G.A. 1824
Scott, J.A. 6880, 7123
Scott, J.G. 5049, 5794
Scott, N. 102, 342
Scraba, D.G. 3878
Scriver, J. 4757
Scriver, J.M. 3595, 4602, 5677, 6725
Scriver, M. 5970
Scudder, G.G.E. 7310
Seabrook, W.D. 5291
Seagle, H.W. 6598
Searle, L. 9228
Sears, M. 9266
Sears, M.K. 4357
Seastad, T.R. 2111, 2114
Seavey, J.A. 5458
Sebeleva, T.E. 3880
Sechan, Y. 9249
Sechler, D.T. 9293
Seckinger, A. 6149
Sedlak, B.J. 3343
Seely, R.H. 2281
Seely, T.D. 2281, 3044
Seelinger, G. 4307, 4978
Seetharaman, R. 5404
Segal, A. 1330
Sehgal, O.P. 9293
Sehnal, F. 2691
Sehnal, F.E. 7862
Seib, P.A. 6519
Seif, A. 576, 7653
Seifert, E. 337
Seifert, R.P. 5951, 6862
Seitz, C.A. 2546, 3269, 7764
Sekhon, B. 9282
Sekhon, B.S. 9104
Sekizuka, H. 7643
Selander, R.B. 2496, 5638, 6839, 9125
Selmeier, A.G. 4544
Selick, H.E. 1528
Selivanova, G.V. 7847
Sell, C.R. 3785
Selzer, R. 7295
Semena, Y. 8876, 8878
Sempiak, S.D.K. 1295, 3687, 8369
Semushin, R.D. 9195
Sen Gupta, T. 4809, 7160
Sen-Sarma, P.K. 926, 1747, 5418, 5427
Sen-Sharma, P.K. 7716
Sen, S. 9057
Senapata, B. 2963, 5498
Sendstad, E. 5267
Sengbusch, H.G. 3965, 8717
Sengonca, C. 4250, 4727, 4738
Sengupta, R. 5260
Senior, A. 1889
Senst, K.M. 6962
Seo, T. 4616, 8538
Seong, S.I. 952
Seppanen, R. 2104, 9186
Serbenyuk, S.A. 9462
Serda, J.G. 5896
Serfling, E. 3880
Sergueva, T.K. 6860
Serrano, J. 3889, 3890
Serzedello, A. 1137
Seshu Reddy, K.V. 4077, 4557
Sethi, G.R. 7355, 7356, 7358, 7359, 7418, 7448, 7783
Setokuchi, O. 1306
Seubert, S. 6881
Sevachenan, V. 8558
Sevatopulo, D.G. 7907
Severinghaus, L.L. 1177
Severinghaus, S.R. 2113
Sevour, R. 8894
Sexton, S.B. 1003, 2902
Sha, C.-Y. 999
Shaaya, E. 7455
Shaefer, C.W. 2352
Shaffer, S.A. 7207
Shafiq, S.A. 322
Shah, F.A. 1145
Shah, T.A. 1145
Shaheen, A.A. 7650
Shahi, K.P. 2972, 7480
Shakhbazian, A.K. 9379
Shahar, S.H. 7011
Shalaby, F.F. 6727, 6728, 6730, 6807, 6809, 6812, 6957
Shalaby, F.Y. 5829
Shalmon, B. 9114
Sham, S.K. 9235
Shanani, M. 1745
Shanahan, G.J. 1520
Shankland, M. 332, 333
Shanks, C.H. Jr. 554
Shanmugasundaram, M. 2683
Shao, L. 8166
Shapiro, A.M. 2136, 5497, 6698, 7122, 7878, 6340
Shapiro, J.A. 9380
Shapiro, J.P. 3488
Shapiro, M. 3072, 3828, 8008, 8145
Sharaf, N. 7462
Sharkey, M.J. 2621
Sharikov, A.R. 9460
Sharma, A. 8981
Sharma, A.K. 3591, 6798
Sharma, B.L. 6473, 7775
Sharma, D.D. 7704
Sharma, G. 4238
Sharma, G.D. 7802
Sharma, G.K. 7791
Sharma, H.C. 5295, 6146, 7401, 9080
Sharma, J.C. 379
Sharma, K.D. 9256
Sharma, K.K. 78, 90
Sharma, L.S. 6268
Sharma, M.L. 4575
Sharma, O.P. 2323, 2325
Sharma, S.P. 4337, 5364
Sharma, U. 4260
Sharma, V.K. 3033, 5135, 6931, 7688
Sharma, V.P. 628
Sharomov, A.A. 6342, 6347
Sharp, J.L. 2230, 8228
Sharp, M.J. 9492
Sharp, S. 1496, 3061, 9390
Sharp, T.D. 5456
Sharpe, J.H. 6115
Sharpe, P.J.H. 2692, 2695, 3643
Sharrad, R.D. 3584
Shaskan, R. 5848
Shastri, U.V. 2183
Shatalkin, A.I. 6395
Shatrov, A.B. 7146
Shaukat, S.S. 9001
Shaul, E.Y. 8723
Shaver, T.N. 1475, 2203, 6578
Shaw, D.D. 3924
Shaw, F.W. 2998
Shaw, K.C. 2286, 6993, 9361
Shaw, K.E.S. 3097
Shaw, L.N. 4072
Shaw, M.R. 502, 4338, 5615, 6009, 6314
Shchekin, Y.Y. 7071, 7088
Shchekin, Y.Y. 7234
Shea, P.J. 2149, 8525
Shear, W.A. 986, 6714
Shearer, D.A. 8090
Shearnman, R.C. 537
Sheasby, J.L. 5520
Shelley, R.M. 4911
Sheets, T.J. 5416
Shehata, S.M. 8547
Sheikh, K.H. 9369
Sheldon, B.L. 1553
Shelley, A.J. 1196
Shelley, R.M. 4911
Shelly, T.E. 6681
Shelton, A.M. 6119, 8502, 8508
Shemanchuk, J.A. 313
Shen, W.Z. 562
Shepard, M. 695, 1149, 1690
Shepherd, A.J. 1721
Shepherd, J. 4282
Shepherd, R.F. 4589
Shepley, A.W. 8101
Sherman, K.E. 5743
Shermon, A.W. 6250
Sherroff, D. 2134, 2135, 5240
Shirao, S. 2173, 4506, 4524, 8583, 9268
Simmonds, F.J. 2960
Simmons, G.M. Jr. 7814
Simmons, J.R. 8263
Simmons, K.R. 4088
Simmons, M.J. 1102
Simmons, P.J. 909, 4961
Simoon, C. 2154
Simoon, C.M. 6294
Simoon, M.A. 1494
Simonatos, R.A. 8545
Simonatos, T. 2685, 2973, 3492, 3744, 3799
Simons, J.N. 7697
Simova Tosek, D. 3552
Simpon, B.B. 91, 9358
Simpon, C.L. 2197, 8556
Simpon, C.M. 2655
Simpon, J. 194
Simpon, P. 1084, 1523, 3468
Simpon, S.J. 2056, 4991, 8303
Simpon, T.A. 984
Sims, S. 7859
Sims, S.R. 8222
Simser, D.H. 2741, 2754
Simson, E.C.L. 9445
Simwat, G.S. 5330
Sin, Y.T. 3908
Sinclair, D.A.R. 3102
Sinclair, E.B. 870
Sinclair, J.B. 8511, 9277
Sinclair, M. 5508
Sinden, R.E. 2625
Sinegre, G. 8995, 8996, 8997
Sing, C.F. 3116
Singal, S.K. 7275, 7911
Singer, M.C. 4326, 5955, 6660, 6675
Singh, Gausman, S.S. 6946
Singh Sidhu, D. 5072
Singh Verma, K.V. 1981
Singh-Mamder, B. 1226
Singh, B. 5298, 5361
Singh, B.J. 6934
Singh, B.N. 3915, 8251
Singh, D. 6287, 6925, 9336
Singh, D.S. 5355, 7410, 7417, 7421, 7736, 7782, 7795
Singh, G. 4323, 6641, 7492
Singh, G.J.P. 301, 5778, 5784, 5797, 5799
Singh, J. 4443, 7733
Singh, K.M. 7359, 7433, 7495, 7737, 7741, 7763, 7766, 7772
Singh, L.K. 4517, 7773
Singh, L.S. 7548
Singh, L.K.R. P. 7385
Singh, M. 8441
Singh, M.N. 7253
Singh, M.P. 6224, 8604
Singh, O.P. 784, 5466, 6624, 6674, 6767, 7175, 7475, 8251
Singh, P. 78, 90, 7463
Singh, R. 7706, 7712
Singh, R.K. 7698
Singh, R.N. 7741
Singh, R.P. 556, 7347, 7348, 7380, 7440, 7531
Singh, R.S. 3042, 7868
Singh, S. 7311, 7403, 7773
Singh, S.J. 3703
Singh, S.M. 2335
Singh, S.N. 2159
Singh, S.P. 1216, 7719, 7740, 7751, 7784, 8451
Singh, S.V. 1456, 2235
Singh, T. 5280, 6070, 7166
Singh, T.K. 6513
Singh, U.V. 249, 4176
Singh, V. 5364
Singh, V.P. 6801
Singh, V.S. 7742
Singh, V. 7433, 7495, 7737
Singh, Y.N. 993, 5666
Singh, Z. 9167
Sinha, D.P. 4260
Sinha, P. 4677
Sinha, P.P. 7695
Sinha, R.N. 1731, 8513
Sinha, S.R.P. 4071, 8407
Simbaldi, R.M. 4158
Sinnah, B. 657
Sinnah, D. 657
Sorce, P. 7410, 7417, 7736, 7758, 7782, 7795
Sirodian, J.F. 3689
Sitarman, S. 1439, 6214
Sitar, R. W. 1952, 8292
Sitt, H. 3310
Sivaraman, M. 2092
Sivasubramanian, P. 2335
Sivce, J. 3230, 3231, 3936
Sivchikava, V. 1849, 1995
Sivogren, R.D. 7493
Skehon, J.L. 3281
Skevington, S.J. 6278
Skubinski, D.O.F. 3920
Skinner, G. 4752, 6188
Skinner, J. 1849
Skinner, D. 4107
Sklar, A. 7631
Skarsz, B. 6575
Skar, V.E. 9133, 9474
Skopik, S.D. 9045
Skarla, W.H. 1280
Skar, K.A. 630
Skrynik, E.M. 8966
Skrypczyńska, M. 9110, 9201
Skurav, V. 7512
Skvortsova, T.M. 8985, 9250
Skynanov, G. 3006
Slabzeck, U. 746
Slaf, M. 660, 6054
Slansky, P.J. 4464, 4757
Slater, J.A. 825, 2370, 7979, 8801
Slaw, M.W. 6799
Slawmaker, P.H. 8011
Slavator, M. 233
Slawson, L. 2277
Slesvor, K. 1419
Slesvor, K.N. 223, 1776, 5704
Sligh, C. 3158
Slipht, J.L. 8178
Slipinski, S.A. 4813, 8767
Slodochukoff, C.N. 8039
Sloum, S.S. 7772
Slouser, J.E. 2196, 3761, 3814, 6125
Small, G.B. Jr. 4939
Smallwood, J. 7004
Smart, L.E. 194
Smieton, L. 2277
Smeyers-Verbeke, V.P. 7690
Smietana, A. 2399
Smiley, J.T. 2947
Smulowitz, Z. 318, 584, 1234, 1873, 6022, 8548
Smurnov, V.B. 1534
Smurnov, S.G. 9293
Smurnov, S.N. 8862, 8965
Smith Meyer, M.K.P. 8724
Smith, A. 644
Smith, B.H. 6787
Smith, C.F. 5589
Smith, C.R. Jr. 6700
Smith, D. 8644
Smith, D.B. 3450, 4357, 8457
Smith, D.C. 3639
Smith, D.F. 3876
Smith, D.H. 1466, 7266, 8004
Smith, D.M. 542, 628, 1393
Smith, D.R. 2447, 3149, 5598, 7818
Smith, D.W. 8616
Smith, E.S.C. 2989
Smith, G.C. 878, 1792, 5622
Smith, H.C. 5192
Smith, I.B. Jr. 3760
Smith, J.C. 6190
Smith, J.D. 996
Smith, J.B. 5921, 5930
Smith, J.M. 8530
Smith, J.P. 3743
Smith, J.S. 2091, 7255
Smith, J.W. 382, 1139, 2957
Smith, J.W. Jr. 3577

- Smith, K.G.V. 5189.
Smith, L. 3791.
Smith, M. 4671.
Smith, M.C. 194, 212, 3022, 5292, 6979.
Smith, M.T. 536, 2797, 6724.
Smith, M.V. 5320.
Smith, P.D. 5444.
Smith, P.R. 2618, 8444.
Smith, R.E. 3250.
Smith, R.H. 4536, 5231.
Smith, R.J. 885, 1080, 3467, 7429.
Smith, R.L. 2884.
Smith, S.K. 8596.
Smith, S.L. 5002.
Smith, S.M. 9289.
Smith, S.N. 4955.
Smith, S.S. 3076.
Smith, W.A. 8245.
Smithcocks, J.F. 2929.
Smithers, C.N. 1676, 3232, 4910.
Smithshuler, C.L. 5701, 6144.
Smittle, B.J. 2008.
Smol, L.A. 2443.
Smola, U. 3288, 2667, 6531.
Smrz, J. 6539.
Snech, B. 1011, 2643, 7787.
Snellen, R.K. 3859.
Sneller, V.P. 288, 289.
Snelling, R.N. 7217.
Snodgrass, R.J. 1617, 1618, 1620, 4821, 4943.
Snodgrass, L.J. 1426, 6166.
Snow, J.W. 678, 2206, 4587, 6037, 8560, 9345.
Snow, W.F. 1201, 3355.
Snodgrass, R.D. 5444.
Snoddy, T.P. 7031.
Soares Barata, J.M. 4099, 5286.
Soares, A.E.E. 768, 1524.
Soares, B.A.M. 6361, 7157, 8738, 8739, 8755, 8774.
Soares, H.E.M. 6353, 6354, 8738, 8739, 8741.
Sobels, F.H. 2312.
Soberton, J.M. 523.
Sobey, W.R. 7627.
Sobrero, L. 7105.
Socha, R. 2711, 8225, 9058.
Soederstroem, E.L. 8778.
Soeda, T. 8435.
Soell, D. 1496, 3061, 9390, 9396.
Soemne, L. 979, 6579, 6583.
Soemro, H. 1830, 2768.
Soenstgaard, E. 4750.
Sofield, R.K. 6710.
Sogawa, K. 1288, 2297, 3604, 5489, 5675.
Sohal, R.S. 193, 321, 429, 4237.
Sohi, A.S. 7738, 7790.
Sohi, S.S. 1026.
Sokla, A.G. 8818.
Sokla, R. 71.
Sokolova, E.I. 9012.
Sokolova, M.I. 8849.
Solabarneta, M.E. 621.
Solbreck, C. 5890.
Solbreck, C.H. 719.
Soldan, T. 2355, 6715, 6774, 8798, 9008.
Solegrud, M.E. 5554.
Solem, J.O. 3862, 5429.
Soler Cruz, M.D. 8049, 8337, 9145.
Soler-Cruz, M.D. 4103, 8046, 8050, 8051.
Sols, E. 3529.
Sollers-Riedel, H. 1350.
Solomon, B.P. 449, 2839.
Solomon, J.C. 2801.
Solomon, J.D. 3798.
Solomon, M.D. 8386.
Soluk, D.A. 2497.
Solomach, N. 3441, 3442.
Somchit, L. 9408.
Somchodhury, A.K. 3020, 5050.
Sommerfield, S.D. 6053.
Somme, L. 3553.
Sommeijer, M.J. 7005.
Sommermeijer, P.J.A. 2304.
Sommerstine, D.E. 1322, 1907, 5008.
Sonenshine, D.E. 2614.
Sonnet, P.E. 2219.
Sonntag, V.G. 7605.
Sonobe, H. 3360.
Sonobe, O. 1816.
Sood, S. 1613, 7172.
Sood, S. 7967.
Soper, R.S. 6605.
Soponis, A.R. 1688.
Soranzo, L. 5096.
Sorel, C. 8893.
Sorensen, A.A. 679, 1991, 2274.
Sorensen, D.A. 5441.
Sorensen, E.L. 2055.
Sorensen, M. 3977, 4712.
Sorjonen, J. 9162.
Sork, V.L. 2047.
Sotherton, N.W. 4334, 7618, 8396, 8567.
Sotouva, V. 9283.
Souissi, R. 479.
Soundararajan, V. 6926.
Southard, S.G. 8323, 8329.
Southern, D.I. 6258.
Southgate, B.A. 1357.
Southgate, B.J. 5641.
Southwick, E.E. 873, 4641, 5417.
Southwood, T.R.E. 5621, 6842.
Souto Court, M. 816.
Sower, L.L. 4585, 8584.
Spahr, R.J. 5047.
Spangler, P.J. 1607, 3167, 3184, 3980, 4790, 4918, 4930, 6356.
Spanjer, W. 4215, 4217.
Spano, M.A. 5476.
Spanton, S.G. 3383.
Sparks, A.N. 1943, 3540, 4291, 4610, 8253, 9298.
Sparks, T.C. 206, 1973, 5790, 8206.
Sparnany, T. 217.
Sparrow, J.C. 7853.
Spatcher, P.J. 3353.
Stefano, G.E. 178.
Spatz, H.-Ch. 2764.
Speed, W. 8973.
Sprengel, M.C.D. 4706.
Spence, R.J. 3867.
Spence, K.D. 340.
Spencer, F.A. 9416.
Spencer, H.C. 1280.
Spencer, J.P. 2206.
Spencer, K.A. 5522.
Spencer, N.R. 531.
Spentlich, D. 3928.
Spickett, A.M. 12, 519.
Spiegelman, G.B. 9389.
Spiceman, A. 635, 2583, 7362, 8422.
Spies, R.D. 5885.
Spiess, C.J. 3041.
Spiess, E.B. 1144, 6276, 6678.
Spieth, H.T. 1554, 1562.
Spitkovskii, D.D. 9379.
Spritzer, K. 9182, 9481.
Spillitsoe, C.M. 7373.
Spradbery, J.P. 861, 1896.
Spradling, A.C. 5454, 5469, 6248.
Spragg, J.H. 368, 3502.
Sprengel, R.K. 349, 1166.
Springer, A.H.K. 5909.
Springer, B.P. 7555.
Springhetti, A. 8226.
Srekanantavong, H.S. 166.
Sreerama Reddy, G. 7174.
Sridhar, S. 3885.
Srinivasan, K. 4529.
Srinivasan, S. 4520.
Srinivasan, T.E. 5407.
Srivastava, R.P. 7748.
Srivastava, A.S. 7323, 7415.
Srivastava, B.G. 7447.
Srivastava, B.P. 7747.
Srivastava, K.L. 7384.
Srivastava, K.P. 4569, 5326, 5396, 7758, 7795, 8930.
Srivastava, O.P. 7773.
Srivastava, P.N. 934.
Srivastava, R.P. 7754.
Srivastava, S.C. 1181, 5278.
Srivastava, U. 934.
Srivastava, U.S. 5828.
Srivastava, V.S. 7417, 7736, 7758, 7782.
Staak, C. 2011.
Staal, G.B. 8447.
Stacy, J.L. 4758, 6598.
Stacey, A.L. 2237.
Stadler, D.L. 8389.
Staddon, B.W. 3377.
Stadelbacher, E.A. 347, 1457, 2085, 3012.
Stafford, C. 1833.
Stange, D.A. 2199.
Stans, G.R. 269.
Stallwood, B.R. 9091, 9093.
Stamatus, N. 2315.
Stamer, J.R. 8508.
Stamou, G.P. 6002.
Stamp, N.E. 1220, 4932, 7612, 8317.
Stanley, L.N. 1433, 6937.
Standow, K.A. 5493.
Standmann, R.W. 8722.
Stanford, J.A. 6124, 8904.
Stanford, J.A. 1714, 6235, 9373.
Stange, L.A. 1709.
Stanghellini, A. 9240.
Stanley, N.F. 3698.
Stanton, M.L. 6682.
Staples, R. 727.
Starage, W. 15.
Stares, V.A. 6577.
Stark, B.P. 1673, 1675, 3860, 6456, 6458, 8036, 8037, 8268, 8269.
Stark, J.D. 1254.
Stark, R.J. 1798, 3296.
Stark, S.B. 5834.
Stark, W.S. 2539.
Starks, K.J. 2054, 2191, 2835, 3737, 3822, 4638, 8460.
Stark, W.T. 2785, 4342, 5917.
Starratt, A.N. 1061, 3282, 8555.
Stary, J. 6403.
Stary, P. 6769, 6774, 7902, 9142.
Staten, R.T. 1398.
Statzner, B. 561, 7026.
Stav, B. 1771, 1884, 2589, 3494, 5004.
Stebbins, H. 106, 1077.
Stebnicka, Z. 20, 21.
Steehe, W. 4210.
Steck, W. 2583.
Steck, W. 2583, 5702, 7335.
Steck, C.G.H. 4273, 4340, 5002.
Steele, G. 5822.
Steele, J.E. 1759, 3321.
Steelman, C.D. 1329, 2920.
Stefano, G.B. 2525, 8911.
Steffan, A.W. 792.
Steffan, W.A. 439, 6338.
Steffan, C. 8430.
Steffens, R.J. 9153.
Steffy, K.L. 6118, 6120.
Stegman, C.E. 7923.
Stehlik, J.L. 3209, 3256.
Stein, F.W. 2521.
Steiger, S. 8126.
Stein, E.A. 3335.
Stein, H. 8086.
Stein, J.D. 7519.
Stein, W. 7506.
Steinbrecht, R.A. 7344.
Steiner, A.L. 7693.
Steiner, E. 338.
Steiner, H. 203, 7314, 8952.
Steiner, J.W. 4845.
Steiner, W.E. Jr. 4782, 5139, 6333, 6355.
Steinbauer, A.L. 65, 1229, 9140.
Steinhauer, A. L. 1399.
Steinmann, H. 2406, 7959.
Steinmetzger, K. 7588.
Steinwascher, K. 5895.
Stein, J.A. 1499.
Stein, P.P. 7555.
Steiner, N. 9068.
Stenseth, N.C. 5305.
Stenton-Dorey, J. 541.
Stepanovic, O. 2139.
Stephen, F.M. 9332.
Stephen, W.P. 60, 5729.
Stephenson, R.S. 1740.
Sterling, L. 2200.
Sterling, W.L. 2108, 3237, 3627, 4629, 5971, 6015, 6124, 9127.
Stern, N. 5737.
Stern, Y. 6180.
Sternburg, J.G. 5887, 7597.
Sternlich, M. 862, 4594.
Stevens, D.J. 2042.
Stevens, R. 4392.
Stevenson, A.B. 2697, 3009.
Stevenson, B.G. 8207.
Stevenson, J.H. 194.
Stevenson, P. 2522.
Stevenson, R.D. 8274.
Steward, R.C. 1191, 5128.
Stewart, K.M. 3829.
Stewart, K.W. 42, 1672, 1675, 3859, 6458, 8037, 8268, 8269.
Stewart, M. 4145, 4249.
Stewart, M.M. 1293.
Stewart, N.P. 8983.
Stewart, R.K. 2127, 5262, 8098.
Stewart, S.J. 5275.
Stewart, I.E. 8044.
Stevykal, G.C. 30, 2420, 2425, 3203, 4702, 5649.
Stuchman, N. 8270.
Stiles, A.D. 7395.
Stiling, P.D. 3621, 4368, 5187.
Stiller, D. 4187.
Stinner, J.L. 4435, 6114.
Stinner, J.E. 367, 600, 1864, 2862, 3249, 6005, 6141.
Stinson, A. 1766.
Stinks, R.D. 439.
Stock, M.W. 130, 4229, 8202, 8658.
Stockel, J. 1062.
Stockel, J.P. 424, 4270.
Stockler, A.J. 7837.
Stockler, R.F. 133, 142.
Stocking, B. 6058.
Stoddard, J.A. 4652.
Stoffolano, J.G. Jr. 8076.
Stoka, A. 3322.
Stokes, S. 2840.
Stollar, V. 3057.
Stolte, R.L. 6198.
Stone, B.F. 1800.
Stone, C. 2490.
Stone, C.G. 8552.
Stone, J.D. 6155.
Stone, J.P. 969.
Stone, W.B. 5193.
Stoneburner, A. 553.
Stoneburner, D.L. 2293.
Stoner, A. 1433, 4475, 6201, 6622, 6937, 7684.
Stoppie, P. 1767, 2721.
Storch, V. 6589.
Storck, J.M. 4254, 4255.
Storck, M.B. 238, 948, 4254, 4255.
Storozhenko, S.Y. 7239.
Stort, A.C. 4586, 6532, 7060.
Stort, R.N. 8028, 9202.
Stout, M.K. 1377.
Stoszek, K.J. 1249.
Stout, J. 9372.
Stout, R.J. 2294.
Stowe, M. 1995.
Stoyla, B.O. 8508.
Strachan, T. 7879, 8657.
Straka, V. 2357, 7901.
Strambi, C. 2587.
Strambi, C. 2587.
Strand, M.R. 2597, 5176, 5186.
Strandberg, J.O. 2163, 2222.
Strandmann, R.W. 3963, 4703, 7148, 8721.
Strang, J.G. 688.
Strassen, R. Z. 9479.
Strassmann, J.E. 2155, 3045.
Stratakis, E. 3317, 6566.
Stratton, H.H. 7693.
Stratton, A.L. 9128.
Stratton, G.E. 3541.
Straub, R.W. 3806, 6193.
Strause, L.G. 938.
Streams, F.A. 7017.
Street, D.H. 4521.
Streit, H.P. 7387.
Streit, B. 8650.
Streu, H.T. 44.
Strickland, K. 1063, 6288.
Strickman, D. 1147, 5077, 7125, 7589, 9342.
Strigunova, B.R. 159, 6738.
Stringer, C.E. 2192, 2193.
Srobel, G.A. 4526.
Srobel, M. 8426.
Strohecker, H.F. 4805, 7169.
Strojn, V. 9363.
Strommen, C. 3083.
Strommen, C.S. 9401.
Strong, D.R. 3621, 4368, 4370, 5187.
Strong, D.R. Jr. 593, 615, 8366.
Strong, L. 2894.
Stroyan, H.L.G. 7199, 7744.
Struble, D.L. 698, 742, 3583, 4337.
Struhl, G. 6253.
Struncka, A. 958.
Stuart, A.M. 5634, 6685.
Stuart, R.J. 2042.
Stubbs, A.E. 2126.
Stuckey, M. 9266.
Studer, I. 7400.
Stuessy, T.F. 4396.
Stutkens, M.R. 6945.
Stutkens, M.W. 453, 2256, 3801.
Sture Eriksson, E. 7304.
Susak, J.M. 3256.
Sutyn, D. 4160.
Suy, P. 6417, 6671, 8802.
Su, L. 25.
Su, N.Y. 4606, 8554.
Su, T.H. 3397.
Su, Z.H. 4559.
Subba Rao, B.R. 35.
Subhahini, K. 897.
Subra, R. 1316.
Subrahmanyam, B. 275.
Subrahmanyam, G. 7856.
Subrahmanyam, K. 154.
Subrahmanyam, A. 2638.
Suchant, S. 4469, 4691, 5770, 6060, 7259.
Sudic, M. 1808, 2013.
Suda, Y. 1292.
Sudath, F.L. 8174.
Sudoruddin, K.I. 5774.
Sudomo, M. 6062.
Suess, J. 3729.
Sugawara, R. 2593, 3734, 3831.
Sugawara, T. 903.
Sugden, L.G. 5190.
Sugden, M.A. 2213, 3731, 4595.
Sugimoto, A. 856.
Sugimoto, T. 7577.
Sugiyama, H. 2570, 7317.
Sugoniev, E.S. 6434.
Sugumaran, M. 8943.
Sukhani, T.R. 3003, 5358, 7483, 7777.
Sukhija, H.S. 5263, 7701.
Sukhova, M.N. 9434.
Sula, J. 958.
Sulaiman, I. 1263.
Suleman, I. 2623.
Sullivan, D.J. 2830.
Sullivan, J.D.S.I. 5925.
Sullivan, M.E. 8957.
Sulzer, A.J. 1004.
Suman, C.L. 4418, 4534.
Sumegi, J. 8645.
Sumimoto, A. 3684.
Sumlin, W.D. III 4804.
Sumner, J.W. 1989, 4481.
Summers, C.G. 2870, 2886.
Summers, G. 2478.
Summers, M.D. 5757, 5122.
Summers, T.E. 609.
Sun, B.L. 8151.
Sun, C.-N. 8190, 8504.
Sun, C.N. 3443, 4222.
Sunderland, K.D. 8389.
Sung, S.-M. 841.
Sutcliffe, K. 6060.
Suri, V. 7035, 7841, 9407.
Survive-Bazeille, J.-E. 3267.
Suryk, A. 5662.
Suryanarayanan, T.S. 3409.
Sustek, Z. 6359, 5771, 8770.
Sutcliffe, J.R. 4142.
Suter, R.B. 463.
Sutherland, B. 2169.
Sutherland, D.J. 4985, 5243, 7014.
Sutherland, O.R.W. 6912.
Sutherland, S.S. 1333.
Sutherland, S. 649, 3832.
Suto, C. 1161.
Sutter, G.R. 691, 1617, 6915, 8194.
Sutton, B.B. 639.
Sutton, R.D. 7268.
Sutton, R.M. 1806, 1812.
Sutton, T.E. 3585.
Suwa, M. 7177, 7815, 7913.
Suwa, Y. 1215.
Suzuki, A. 3360, 7529.
Suzuki, D.T. 3102.
Suzuki, K. 1098, 5819.
Suzuki, M. 82, 9206.
Suzuki, N. 2858, 3458.
Suzuki, S. 5550, 6496, 7155.
Suzuki, T. 1098, 2591, 2594, 6062.
Suzuki, Y. 2745, 4294, 4663, 4993, 7497.
Svee, H.J. 8665.
Swain, T. 3384, 3942.
Svensson, B.S. 3055, 4477.
Svensson, B.W. 7102.
Svensson, I. 4722, 7997.
Svensson, I.R. 7085.
Sveum, P. 4037.
Svitra, P. 2062, 6195.
Svoboda, J.A. 1407, 3487.
Swailen, S.M. 6651, 6949, 6965, 7650.
Swales, G.E. 3583.
Swain, T. 317.
Swannathan, S. 401, 3615, 9137.
Swamy, M.S. 1745.
Swan, M.A. 105.
Sward, R.J. 8444.
Sweeney, A.W. 1008, 1039, 1807, 7367.
Sweeney, B.W. 5430.
Syrén, P. 3471, 6671, 8802.
Swegman, B.G. 7027.
Swegman, N. 8193.
Swezey, S.L. 4228.
Swift, F.C. 4583, 8500.
Swift, M.C. 489, 3916.
Swift, M.J. 2809.
Swincer, D.E. 1964, 3821.
Swindlehurst, M. 3887.
Swings, J. 8310.
Swirski, E. 2945, 5390, 7505, 8725.
Swofford, D.L. 2336.
Sykora, J.L. 7027.
Syren, P. 1111.
Sylvester, H.A. 53, 8026.
Symmons, P. 2513.
Symmons, P.M. 7573.
Symonds, R.J. 4914.
Syren, R.M. 3077, 3892.
Szabo, G. 2308.
Szabo, J.B. 7986, 7988, 7989.
Szabo, T.I. 2010, 6081, 6178, 9433.
Szaboky, C. 7995, 8684, 8686.

Author Index

- 22

- Ullmann, G. 3982.
Ullman, G. 7639.
Uljehly, D.S. 3940.
Uljehly, S. 8675.
Uljiye, T. 2347.
Ulrich, F.-H. 758.
Ullman, P. 3841.
Ullman, P. 1018, 3405.
Ullrich, H. 626.
Underhill, E.W. 223, 2201, 3583, 5702, 7335.
Underkoffler, L.A. 7128.
Unnthan, G.C. 4432, 4434.
Uno, T. 7529.
Unruh, R. 1835.
Unruh, T. 8589.
Unwin, D.M. 3258, 4914.
Upanchalwar, A.R. 7749.
Uralov, A. U. 8985.
Urbaneck, R. 8434.
Urban, C.B. 7444.
Urban, T. 7630.
Urtani, I. 951.
Uschan Khan, F. 384.
Ushatinskaya, R.S. 7608.
Usherwood, P.N.R. 1731, 3266.
Ushoda, Y. 3292.
Ustrovica, M. 1066.
Ustrovic, Y. 9195.
Uthberg, G.L. 5243, 7014.
Utch, K.B.W. 3832.
Van Rensburg, D.J.J. 5018.
Van Rensburg, N.J. 1682.
Van Sambeek, J.W. 383, 1150.
Van Seventer, H.A. 9015.
Van Smith, H. 1420, 3745.
Van Stalle, J. 9482.
Van Steenbrugge, G.J. 2331.
Van Steenwijk, R.A. 2060, 8327, 9343.
Van Uffelen, G.A. 7565.
Van Veen, J. 2020, 5179.
Van Woeren-Kramer, J. 5768.
Van Weterre, P. 1312.
Van Winkle, K.A. 8406.
Van Wissen, W. 217.
Van Zon, A.Q. 2664, 4257.
Vance, G.C. 3663, 4492.
Vandenberg, J.S. 2614.
Vandenberg, J.D. 60, 5729.
Vandepopulaire, J.M. 1387.
Vander Meer, R.K. 1942, 1993, 4304, 5716.
Vandermeers, R.J. 987.
Vane-Whight, R.I. 839.
Vanharha, A. 4003.
Vanharja, J. 2358, 7016, 7101.
VanHeertum, J.C. 1067.
Vanhercke, L. 9483.
VanHoof, H.A. 1978.
VanKoten, J. 7651.
Vannini, M. 5108.
Vannone, R.L. 5430.
Vandans, A. 6518.
Vardell, H.H. 363, 365, 2251, 3784, 3793, 6928.
Vargu, D. 151.
Varga, A.C. 4364.
Varma, B.D. 617.
Varma, G.C. 1226.
Varma, M.G.C. 7450.
Varma, M.R.G. 2926.
Varma, R.R. 7479.
Varn, R.V. 8914.
Varnam, A.R. 110.
Varshavsky, A. 9395.
Varshney, R.K. 6512.
Vasarielyi, T. 8032, 8685.
Vashistha, S.C. 9256.
Vasilescu, P. 2616.
Vasiliu, L. 857, 6590.
Vasta, G. 8438.
Vasudevan Narair, K.P. 1815.
Vaughan, P.F.T. 1734, 6526.
Vaughn, J.L. 878.
Vaughn, L. 3417.
Vaupe, O. 706.
Vay, J. 1018.
Vaz Nunes, M. 3483.
Vazeille, M.C. 3393.
Vazirani, T.G. 3180.
Vecchi, M.A. 5001.
Van Aepel, J.J. M. 5375, 7273, 7769, 9081.
Vengalangan, K. 663.
Veeragh, G.K. 4347, 4934, 5255, 5368, 5374, 5541.
Veerkamp-Van Baarle, A.A. M.J. 2312.
Veerman, A. 8483, 4257.
Veer, C.M.Z. 7124.
Veivers, P. 3424.
Velarde, M.G. 3802.
Velasco-Currie, R.D. 4217.
Vellissariou, V. 2307.
Vellacott, H.P. 1003.
Velthuis, H. 4376.
Velthuis, H.H.W. 469, 3044, 6992.
Vendramin, J.D. 6189.
Venier, P. 6865.
Venkatesh, K. 4159, 8241.
Venugopala Rao, N. 7771.
Vespasalecine, K. 6003.
Verbeek, H.J. 7005.
Vercambre, B. 7753.
Vercammen-Grandjean, P.F. 798.
Verduysse, J. 9239.
Verdejo, C. 7029.
Vergara, S. 1825.
Vergini, Y. 1497, 3921, 7866.
Verhaeghe, J.C. 3348, 3840.
Verhoef, H.A. 2604.
Verma, A. 9050.
Verma, N.N. 5331, 5371, 5372, 5373, 5398, 7788.
Verma, G.C. 6625, 7682.
Verma, J.P. 7380.
Verma, L.R. 4277.
Verma, R.S. 7706, 7711, 7712.
Verma, S. 6897, 7402, 7740.
Verma, S.K. 1441, 7683, 9256.
Vernon, P. 6828.
Vernon, R.S. 5142.
Versoi, P.L. 595.
Vertinsky, I.B. 1450.
Vervelle, C. 1846.
Verves, Y.G. 3147.
Vesilind, M.M. 2605.
Vesilova, F.M. 7173.
Vetter, L.E.M. 7543.
Vetter, R.S. 407, 4913.
Veuille, M. 1552.
Veyrines, J.C. 1025.
Vick, K.W. 2219, 8507.
Vickerman, G.P. 8393.
Vickerman, K. 3674, 3675, 4185.
Vickers, R.A. 3464, 3549, 5871.
Vick, B. C. 7844.
Vidales, F.J. 3332.
Vieu, F. 4280.
Vieillemanne, J. 8907.
Viejo, J.L. 7076.
Vienna, P. 3998.
Viennu, G. 4881.
Vigo, G. 8996.
Vik, M.O. 6560.
Vitasano, M. 1653, 4875.
Vivargier, J. 5364.
Vikberg, V. 1653, 4875, 7209.
Vilabardo, A. 1454.
Vilabre, J. 4935.
Vila, J. 7816.
Villavaso, E.J. 2677, 5293, 8541, 9325.
Villegas, B. 6450.
Villiers, A. 1602.
Vimala Devi, K.S. 4271.
Vilmon, W. 2290.
Vincent, D.L. 2021.
Vincent, J.F.V. 3271, 7283.
Vincent, M. 7838.
Vincent, R. 7075, 9103, 9456.
Vinus, G. 2441, 2500.
Vintura, N.S. 6469.
Vinson, D. 2524.
Vinson, S.B. 4379.
Vinson, S.B. 1991, 2933, 2274, 2509, 2597, 2811, 2815, 3078, 5176, 5186, 8113, 8122, 9365.
Vintova, M. 8835.
Vintura, R.V. 8914.
Vintura, S. 9304.
Virakamath, C.A. 4861.
Virgona, C.T.F. 5003.
Virkik, A.D. 8962.
Visalakshi, A. 1843, 1847, 2089.
Visalakshi, E. 3092.
Visalakshi, M. 3631.
Visser, S. 2796.
Vistorn, H.E. 496.
Viswam, K. 466, 3525.
Viswanath, B.N. 5257, 5365, 5377, 5378, 5425.
Vital, G. 809.
Vital, G.C. 3205.
Vite, J.P. 701, 706, 2194, 4313.
Viveros, M. 6907.
Vladescu, A. 2013.
Vlak, J.M. 1823.
Vlasova, E.E. 2320.
Vlasov, H.J. 5648.
Vlodcheniarov, P. 9288.
Voegel, J. 2455, 4876.
Voegtlin, D. 7793.
Voegtlin, D.J. 4471.
Voerman, S. 5701.
Vogel, G. 8739.
Vogel, K.P. 726.
Vogel, O. 5069.
Vogt, P. 9386.
Vogt, W.G. 1311.
Vojnits, A. 8704.
Volkov, B. 6470.
Volmer, L.B. 6470.
Volmer, H. 112, 2571.
Volney, W.J. 4571.
Von Ende, C.N. 5683, 7015.
Von Kaster, L. 5900.
Von Losch, S. 7908.
Von Mentzer, E. 4893.
Von Wissack, W. 7580.
Voilma, K.K. 6560.
Vos, H. 4388.
Voshell, J.R. Jr. 1632, 1674, 1678, 3054, 3935.
Voss, J.R.R. Jr. 4172.
Voss, E.G. 2364.
Voss, H.J. 1888.
Vosselman, L. 2316, 2330.
Vostrowsky, O. 3279.
Voth, V. 3776, 6163.
Vourakis, J.M. 3914.
Vrijenhoek, R.C. 2336.
Vrijhof, K. 6577.
Vuillaume, G. 1454.
Vuillaume, M. 8900.
Vukovic, M. 3552.
Vutikes, S. 6060.
Vyas, H.K. 5361.
Wadano, A. 881.
Waddell, V. 206, 4555.
Waddell, H.H. 508, 709, 4567.
Waddington, K.D. 748, 3543.
Wade, M.J. 8670.
Wadewitz, A. 7353.
Wadhams, L.J. 7297.
Wadsworth, S.C. 4672.
Wagner, H. 7289.
Wagner, M.P. 623.
Wagner, R. 1630, 3192, 3199, 3865, 4730, 55

- Weiss, S.A. 878.
Weizmann, G. 4982.
Welbourn, W.C. 4101.
Welch, J.G. 8563.
Welch, S.M. 1585.
Wellenmeyer, E.G. 8206.
Wellin, M.J. 3814.
Wellington, W.G. 399, 1450.
Wells, A. 8703.
Wells, H. 542.
Wells, P.H. 542, 6844.
Wells, R.M.G. 1743.
Wells, S.G. 1112, 7928, 9328.
Welton, J.S. 7012.
Wen, J. 999.
Wenbin, J. 9410.
Wendt, H. 5932.
Wenk, P. 662, 2634.
Wenink, P.C. 1496, 1500, 4662.
Went, D.F. 334, 8622.
Wentworth, S.L. 2717, 3361.
Werner, G. 3310.
Wesoloh, R.M. 55, 1219, 7545.
8324, 8331, 8466.
West, C. 5883.
West, C.A. 6293.
West, D.F. 8150, 8153.
West, J.R. 1907, 4313.
West, J.R. 6805.
Westby, E.J. 6131, 9257.
Weserhah, B.B. 5877, 7502.
Westgard, P.H. 688.
Weston, J. 4128.
Westphal, E. 1236, 6910.
Westra, P.H. 1528.
Westwood, A.R. 3159.
Weyda, F. 6505.
Whalon, M.E. 4092, 4630, 7408, 8458.
Wharton, R.A. 2818, 9160.
Wharton, R.H. 3448.
Wheatley, G.A. 4631.
Wheeler, A.G. 4397.
Wheeler, A.G. 32, 1727.
2677, 2776, 2855, 3944, 3947.
5534, 5902, 5904, 6332, 8355.
Wheeler, A.P. 126.
Wheeler, D.E. 6573.
Wheeler, G.C. 4149.
Wheeler, J. 4149.
Wheeler, J.W. 245, 986, 988.
Wheeler, Q.D. 3185, 5227, 9130.
Whelan, P.L. 1556.
Whitcraft, J.W. 4233.
Whitaker, J.O. 796, 1591.
Whitcomb, R.F. 4187.
Whitcomb, W.H. 587, 4433.
White, A.W. Jr. 2091.
White, B.N. 6549, 6550, 6569, 7313.
White, G.B. 7629, 8121.
White, J. 2702, 6161.
White, J.D. 1941.
White, L.D. 586.
White, M.J.D. 3899, 5460.
White, N.D.G. 173, 8513.
White, P.F. 1461, 5394.
White, R.E. 2400, 2401, 2403.
White, R.J. 7618.
White, R.N. 7594.
White, W.H. 8868.
Whitefoot, L.O. 4591.
Whitehead, L.C. 6136.
Whitehead, D.L. 355, 3355.
Whitehead, D.R. 790, 6137.
Whitfield, D.F. 2122.
Whitford, D.N.J. 8476.
Whitford, G. 8598.
Whitford, W.G. 1269, 2132, 2133, 2883.
Whittington, P.M. 337.
Whitman, D.W. 5010.
Whitmore, R.E. 5740.
Whitmore, R.W. 710, 9120.
Whitney, H.S. 5303.
Whitaker, J.B. 2796, 4408.
Whitman, M.J. 7873.
Whynott, D. 3732.
Wiberg-Larsen, P. 6317.
Wick, H. 1324.
Wick, C.A. 5174.
Wicklow, D.T. 4479.
Wickman, B.E. 2880.
Wickramasinghe, M.B. 5979.
Wieda, A.E. 1588.
Widders, P.R. 3268, 3303.
Wiedstrom, N.W. 2039, 2044, 3716, 4625, 5195, 9272.
Wieden, E.D. 8623.
Wiesbe, J.T. 2848, 4877.
Wiederrecht, G.J. 3325.
Wiegand, R.C. 5680.
Wiegant, J. 2304.
Wieland, T. 3074.
Wiener, L.F. 5929.
Wightman, J.A. 5641, 8476.
Wigley, P.J. 2632, 2633.
Wijayagunasekara, N.H. 4380.
Wikel, S.K. 5764, 6058, 6069.
Wiklund, C. 5885, 5890, 9214.
Wiktelius, S. 3562, 4539, 4543, 6826, 7516.
Wilcox, M. 339, 1080, 7429.
Wilcox, R.S. 5868.
Wilcox, T.A. 8143.
Wilcoxon, R.D. 7652.
Wild, C.H. 559.
Wilda, T.J. 7117.
Wildie, G. 536.
Wildner, D.D. 2426, 6399, 6401.
Wildner, W.H. 5624.
Wilding, N. 2621, 3038, 4627.
Wiley, K. 3907.
Wiley, M.J. 2289.
Wilhelm, K.L. 5869.
Wilk, B.M. 2732.
Wilkening, A.J. 1687.
Wilkinson, R.C. 3202, 7965, 7970.
Wilkes, T.J. 1919, 3658, 4354, 4493.
Wilkinson, A.T.S. 2952.
Wilkinson, C. 4760.
Wilkinson, C.F. 1758, 1768.
Wilkinson, F.C. 6889.
Wilkinson, P. 3924.
Wilkinson, P.R. 9181.
Wilkinson, R.C. 3538.
Wilks, A.V. 1351, 3910.
Will, B.M. 7822, 9381.
Will, H. 3073.
Willadsen, P. 3701.
Williams, M.L. 4097.
Willie, H. 3339, 5001.
Willie, R.B. 262.
William, R.D. 3728.
Williams, C. 9353.
Williams, C.F. 270.
Williams, C.M. 3500.
Williams, D.D. 6227, 8605.
Williams, D.F. 1942, 2192, 3437.
Williams, D.G. 3253.
Williams, D.J. 1194, 1580, 3215, 3820.
Williams, D.L. 1329.
Williams, D.N. 4492.
Williams, D.S. 4971.
Williams, E.R. 6999.
Williams, E.S. 9148.
Williams, G. 9502.
Williams, H.J. 1779, 2597.
Williams, I.H. 212, 1182, 5115, 5319, 8533.
Williams, J.B. 4404.
Williams, J.J. 4072.
Williams, J.L.D. 129, 4960.
Williams, J.R. 4864, 4866.
Williams, L.H. 2701.
Williams, M.S. 1322.
Williams, N.E. 6227, 8605.
Williams, N.S. 5607, 6449.
Williams, P. 291, 1445, 2902.
Williams, R.E. 6131, 9257.
Williams, R.N. 3826, 6760, 8487, 9204.
Williams, T.P. 148.
Williams, T.R. 946, 1037, 3452.
Williams, V.G. 1238.
Williams, W.G. 9340.
Williamson, J.H. 7857, 7858.
Willis, J.H. 3331.
Willson, J. 8025.
Willman, J.N. 9181.
Willmer, P.G. 4316, 6580.
Willms, J. 9419.
Willmund, R. 3096, 4689.
Willoughby, B.E. 545.
Wilsen, W.T. 8508.
Wilson, R.F. 380.
Wilson, R.G.L. 2988.
Wilson, A.L. 1172.
Wilson, B.H. 1460, 3010.
Wilson, C.G. 1964, 3821.
Wilson, D.M. 2039.
Wilson, D.S. 8661.
Wilson, E.O. 2272.
Wilson, G.G. 3812.
Wilson, J.A. 8909.
Wilson, J.D. 6053.
Wilson, J.T. 4448.
Wilson, K. 6141.
Wilson, K.G. 3249, 6005.
Wilson, K.I. 7655.
Wilson, L. 5340.
Wilson, F.E. 5413, 7765.
Wilson, L.T. 6107, 6123, 8526.
Wilson, M.C. 8561.
Wilson, M.R. 3632, 5965, 6841.
Wilson, N. 520, 4743, 5530, 6873.
Wilson, R. 6346.
Wilson, R.F. 6821.
Wilson, R.L. 2054, 3822.
Wilson, S. 104.
Wilson, S.W. 1313, 1717, 1984, 1985, 1987, 2362, 3254, 8813.
Wilson, T.G. 1533, 1535.
Wilson, T.M. 1328.
Wilson, W.T. 1433, 2563, 5827, 6181, 6203, 6622, 7062, 7684.
Wimmer, Z. 6647.
Win, T. 8167.
Winberg, J.O. 7315, 7316.
Winberg, L.A. 3685.
Windmill, D.M. 927.
Windstrom, N.W. 6899.
Wing, K.D. 206, 5790.
Wingfield, M.J. 7648.
Winks, R.G. 1046, 3916.
Winstanley, W.J. 9085, 9501.
Winston, J.A. 1446.
Winston, M.L. 1419, 1559, 5210.
Winter, C.E. 3516.
Winterburn, M.J. 6701.
Wirth, W.W. 26, 2413, 3200, 3205, 4844, 7176, 7187, 7964, 8054, 8796.
Wirtz, R.A. 6617.
Wise, D.H. 595, 2157.
Wiseman, B.R. 2044, 3716, 4406, 3395, 8539, 9318.
Witkowski, J.F. 6626.
Witkowski, J.F. 3440.
Witt, T. 4740, 4731, 4739.
Witt, T.J. 4048.
Witter, J.A. 3779, 4755, 8866.
Wittner, V.D. 7406.
Wittner, W. 7944, 7955.
Witz, J.A. 703, 2242, 3627.
Witz, J.W. 3016.
Wiygul, G. 5190.
Wobeser, G. 4167.
Wobus, U. 6247.
Wohlens, P. 7337.
Wosowid, I.P. 2969.
Wojcik, D.P. 7929.
Wojtowicz, J.A. 1716, 5633.
Wold, H. 2890, 4017, 7201, 7984.
Wold, H. 4032, 8823.
Wold, L. 495.
Wolfe, G.W. 4771, 4772.
Wolfe, L.M. 1255.
Wolfenbarger, D.A. 724, 4221, 4635, 6147, 8667.
Wolfenbarger, M.G. 3324, 8081.
Wolf, R.J. 3927.
Wolfgang, W.J. 3518.
Wolfson, J.L. 5960.
Wolgamott, M.L. 409.
Wolberg, Z. 1134.
Wolfeben, E. 1207.
Wolfskind, D. 7596.
Woloshyn, E.P. 3095.
Wolshyn, T.T.Y. 6136, 8261.
Wong, Y. 2083.
Wong, Y.-C. 1503.
Wong, S.M. 187.
Wood, B. 4887, 9345.
Wood, D.L. 1786, 1929, 2007, 3352, 6684.
Wood, G.A. 2375.
Wood, J.A. 1036.
Wood, J.R. 296.
Wood, K.A. 3010.
Wood, L.A. 2278.
Wood, R.J. 1015, 9424.
Wood, T.G. 2809, 4480.
Wood, T.K. 6856.
Woodard, D.B. 1868, 849.
Woodburn, T.L. 1311.
Woodhead, S. 5290, 7284, 7308.
Woodhouse, E. 1621.
Woodroff, S. 9174.
Woodruff, R.I. 3512.
Woods, C.W. 2582.
Woods, R.D. 1033, 5727.
Woodward, T.E. 826.
Woodward, T.C. 3603, 3629, 6275.
Wooley, J.C. 947.
Woollford, C. 4662.
Woollie, J. 1435.
Woollie, J.B. 7543.
Work, R.W. 196, 5718, 8856.
Worley, R.E. 8566.
Worm, R.A. 4059.
Worob, C.B. 7620.
Worthington, R.E. 198, 378.
Woyke, J. 1548.
Wright, S.P. 1817, 3664, 8152.
Wratlen, S.D. 2846.
Wratten, S.D. 2042, 2840, 4633, 7618, 8492, 8672.
Wrenn, W.J. 4101.
Wrench, D.L. 770, 4709.
Wright, A.E. 671, 3698.
Wright, A.H. 5614.
Wright, C.G. 3789, 6032.
Wright, C.L. 736.
Wright, D.E. 2557.
Wright, M.H. 2640.
Wright, S.M. 8338.
Wright, T.H. 1778.
Wright, F.C. 651, 1683, 2170, 2179.
Wright, H. 6912.
Wright, H.E. Jr. 791.
Wright, I.G. 3832.
Wright, J.D. 1542.
Wright, J.E. 1213, 2225, 3486, 4167, 9053.
Wright, J.F. 7013.
Wright, L.L. 3853.
Wright, S. 1110.
Wright, S.P. 1842.
Wright, T.R.F. 765.
Wright, W.B. Jr. 7276.
Wu, A. 524.
Wu, A. 4580.
Wu, M. 8083.
Wu, P. 6007.
Wu, T.-N. 935.
Wu, Y.-I. 3397.
Wu, Z.-N. 426.
Wuelker, W. 6535.
Wuerger, F.E. 7037.
Wuest, J. 5208.
Wunderlich, B. 1324.
Wult, M.H. 2174.
Wun, T.H. 2174.
Wunderer, H. 4967, 6531.
Wunderer, H.G. 3288.
Wunderlich, J. 9177.
Wunderlich, M. 564.
Wurtz, A. 6901.
Wyant, G.R. 944, 9330, 6550, 6569, 7313.
Wyatt, J.J. 8389.
Wyatt, R. 553, 1251.
Wyeth, T.K. 6790.
Wygodzinsky, P. 5611, 8802.
Wyle, H.G. 8316.
Wymann, J.A. 2060, 8239, 8571.
Wymann, R. 5660.
Wymann, R.J. 7285.
Wyse, D.L. 1250.
Wysocki, M. 2845, 5190, 6213.
Wyss, S. 1324.
Xamena, N. 8196.
Xian, Rong, G. 8092.
Xian, Rong, Z. 4406.
Xiao, J. C. 1778.
Xiaoshen, Q. 9393.
Xie, T. L. 874.
Xin, C. S. 5.
Xun, C. 4850.
Yadav, B.S. 5328.
Yadav, H.S. 7779.
Yadav, S.R. 1216.
Yadav, T.D. 3401, 3409, 7669, 7686, 7770.
Yagi, S. 3475.
Yaginuma, K. 2992, 5334.
Yaginuma, T. 3474.
Yaginuma, D.L. 8962.
Yaglom, D.M. 2915.
Yajima, H. 961.
Yakobson, B.V. 9242.
Yakovlev, B. 7631.
Yakovlev, E.V. 538.
Yakubovich, V.Ya. 9220.
Yalome, M.E. 6884.
Yamada, H. 346, 8964.
Yamada, K.I. 5743.
Yamada, S. 3684, 3913.
Yamada, Y. 913.
Yamaguchi, K. 4020.
Yamamoto, S. 2662.
Yamamoto, C. 8184.
Yamamoto, D. 116, 892.
Yamamoto, K. 7100.
Yamamoto, M. 4325.
Yamamoto, R.T. 9340.
Yamamoto, T. 1372, 1838, 3684, 5309.
Yamamoto, T. 5765.
Yamamoto, T. 6555.
Yamane, A. 1929.
Yamaoka, H. 8382.
Yamasaki, N. 3894.
Yamasaki, T. 7238.
Yamashita, O. 2562, 3474.
Yamashita, S. 5667.
Yamashita, T. 733.
Yamauchi, K. 2276, 7000.
Yameli, M.Y. 3316.
Yamura, T. 1372, 3684.
Yanagaya, I. 1736.
Yanes, J.R. 7625.
Yang, C.-M. 1778.
Yang, M.-H. 2640.
Yang, S.-M. 8338.
Yang, T.-H. 1778.
Yankov, A. 9417.
Yannou, C. Z. 2350.
Yannopoulos, G. 2315.
Yano, E. 7789.
Yanovsky, A.D. 1700, 1702.
Yao, W.-P. 475, 2704.
Yaots, Y. 6251.
Yarns, L. 9334.
Yarro, J.G. 478.
Yasuda, I. 5777.
Yasuda, S. 2141.
Yasuhara, T. 2665.
Yasuno, M. 5437, 7021.
Yatagai, M. 1897.
Yates, J.R. 4606, 8554.
Yathorn, S. 9175.
Yazdani, S. S. 7704.
Yeagan, K.V. 1253, 1277, 2138, 2817, 3613, 5082, 5322, 5537, 8322, 9055, 9069.
Yeagan, R. 588.
Yeagan, W.C. 4301, 5409, 5742, 6138, 7398, 9332.
Yeanna, W.C. 2237.
Yeates, R.A. 8126.
Yeaton, R.W. 1840.
Yebakima, A. 9243.
Yedobnick, B. 5482.
Yee, J.M. 5629.
Yee, B.R. 1848.
Yela, J.L. 6501.
Yendol, W.G. 5942.
Yeoh, C.L. 3428.
Yerham, I. 7628.
Yevens, I. 8195.
Yim, J.J. 96.
Yin, C.-M. 5013.
Yin, C.-H.M. 5699.
Yin, C.-M. 1748.
Yin, S.H. 1417.
Yiocom, D.H. 4479.
Yokohama, F. 146.
Yoshida, E. 484, 699.
Yoshida, H. 5691, 7872.
Yonke, T.R. 2099, 2086, 2087, 6870.
Yoshida, H. 2665, 4294.
Yoshida, M. 1348.
Yoshi, R. 23.
Yoshikawa, K. 2901.
Yoshimoto, C.M. 2452.
Yoshikawa, K. 2659, 3434, 5042.
Youssef, A. 983.
Younis, E.G. 8021.
Young, A.M. 4267, 5117, 5141, 5164, 5265, 5967, 6019, 7543, 7578, 7598.
Young, A.S. 2181, 8133.
Young, S.S.Y. 770.
Young, D. 139, 264, 1159.
Young, D.G. 4819.
Young, F.C. 182.
Young, F.N. 809, 3188, 4791, 5096, 485.
Young, G.R. 5357.
Young, H. 1802, 1933, 3382.
Young, J.R. 4581, 8551.
Young, L.L. 6887.
Young, M.D. 1320.
Young, M.R. 6131.
Young, M.W. 5681, 8639.
Young, O.P. 497, 5134, 6376, 6.
Young, R.G. 4240.
Young, S. 2533.
Young, S.S.Y. 770.
Young, S.Y. 1749, 2237, 4201, 5409, 5742, 6138, 7390, 9332.
Young, W.R. 4556.
Yousef, A.A. 7603.
Yousef, A.T.A. 6350.
Yousef, A.-T. A. 6974.
Yousen, A. 6600.
Yox, D.P. 7286.
Yox, B.-L. 36.
Yox, S.J. 5694, 5712.
Yox, U. 44.
Yuan, Y. 5288.
Yudin, A.I. 5811, 8060.
Yue, Y.-X. 3397.
Yukinari, M. 872.
Yukina, M. 3861.
Yurken, C.E. 10, 1547.
Yurchenko, V.V. 8965.
Zaagman, W.H. 7303.
Zabka, M. 801.
Zabza, A. 8940.
Zacharak, R.Y. 7368.
Zachary, D. 4192.
Zadura, M. 9476.
Zafar, T. 9157.
Zagatti, P. 2599.
Zaha, A. 7837.
Zahary, R.G. 6721.
Zaher, M. 6810.

- Zaipng, L. 9393.
 Zaitzev, A.I. 6402.
 Zaitzev, Yu.M. 6483
 Zaitzev, A.I. 8794
 Zaka-ur-Rab, M. 3000, 5315, 5916
 Zakharova, N.F. 9046
 Zalkow, L.H. 1795.
 Zalokar, M. 8850.
 Zaloni, F.G. 1125, 2253
 Zalucki, M.P. 2068, 7581, 7610.
 Zampetti, M.F. 1945.
 Zanits, C.B. 4446.
 Zanker, J. 907
 Zanotti, G. 3074
 Zapata, C. 3060
 Zapatero Ramos, L.M. 8333
 Zapolskikh, O.V. 6542
 Zarnke, R.L. 4743.
 Zauralov, O.A. 1998
 Zavortunk, T.J. 6400, 7115.
 Zawistowski, S. 6277, 9078.
 Zdanek, J. 204, 9294
 Zebe, E. 3368
 Zehner, J.M. 2241, 8535
 Zeigler, D.D. 8268
 Zein el Abdun, A.M. 4562.
 Zelazny, B. 3804
 Zelenayova, E. 7442
 Zelensova, E.S. 9383
 Zeltger, J. 3431
 Zemskaya, A.A. 7109
 Zerah, K. 8074
 Zerche, L. 4711
 Zervas, G.A. 5844
 Zettl, J. 4268
 Zettler, J.L. 2239, 2241, 4223, 8205, 8545
 Zhang, B.-Z. 2895.
 Zhang, G.-Y. 874
 Zhang, G.-Z. 9224, 9226
 Zhang, H.-Y. 8166.
 Zhang, J.-T. 44
 Zhang, P.-B. 6614
 Zhang, Y.-L. 874
 Zhao, G.-F. 8166
 Zhao, S.-X. 7.
 Zheng, H.-Q. 4580.
 Zheng, L.-Y. 824.
 Zheng, L.-Y. 4009
 Zheng, X.-Q. 4580
 Zheng, Z. 847
 Zheng, Z.M. 4904
 Zhi, K.-Q. 8151
 Zhikuan, J. 9410
 Zhmulev, I.F. 2320, 8111
 Zhong, Z.-K. 2780
 Zhongcheng, Z. 9393.
 Zhou, H.-A. 4230
 Zhou, J. 5879
 Zhovtyi, I.F. 9144.
 Zhu, G.-F. 9224.
 Zhu, P. 4230
 Zhu, Z.-W. 4580
 Zhu, E.B. 8965
 Zhuhidov, A.V. 5436
 Zhou, B.-T. 4580
 Zijlstra, J.A. 7039
 Zill, S.N. 145, 8918.
 Zimet, M. 5634
 Zimmering, S. 2324, 5474, 6264, 9019, 9413
 Zimmerman-Gries, S. 7657.
 Zimmerman, J.L. 6240
 Zimmerman, J.R. 5504.
 Zimmerman, M. 528, 5856, 6736, 6793, 6822
 Zimmerman, R.H. 5106, 6041, 8610
 Zinoviev, A.G. 6393.
 Zoilo, L.K. 5443
 Zitnanska, O. 613, 5223
 Zitter, T.A. 7654, 7697, 8455
 Ziv, M. 1907
 Zivkovic, V. 602.
 Zlotkin, E. 1057, 5054, 5801, 8182.
 Zmarlicki, C. 7750.
 Zochowska, K. 8734
 Zohdy, G.I. 7103.
 Zohdy, N.Z.M. 7377.
 Zohny, G.I. 6877.
 Zolotarova, L.V. 9405.
 Zombori, L. 8682.
 Zomer, E. 170, 302.
 Zongshun, W. 9406.
 Zoof, I. 75.
 Zorrilla, M.A. 6737.
 Zotov, V.A. 6581
 Zou, H.-G. 824.
 Zouros, E. 3108, 5477, 8638
 Zubkov, A.F. 6908.
 Zucchi, R. 473
 Zucchi, R.A. 8788, 8790, 8886.
 Zuckner, W.V. 8345.
 Zucoloto, F.S. 4922
 Zumi, V. 6715, 7512, 9044
 Zuniga, C.Ma. 5905.

Zur Strassen, R. 849.
 Zwick, F.B. 6790
 Zwick, H. 5431

Subject Index

- Acanthella**,
synonymy, Broadheadia 4909.
- Achaerina sativae**,
new species, taxonomy, morphology, India 7133.
- Achidius pernandus**,
predators, pests biological control, Hypera postica. Sitona hispidula 612.
- Acheze**,
larvicides, pest control, larvae, Simulium incrustatum, Guyana, Lethem, Buru R. 690.
- Achessa**,
acetylcholinesterase activity, Dacus cucurbitae 7323.
anatomy, coloration, males, Megapodagnonidae, Chlorocyphidae 3362
appendages, sense organs, Gryllus domesticus 803.
cuticle, biochemical analysis, proteins, chitin, Locusta migratoria 2515.
cuticle lesions, Glossina, Kenya 4119.
cuticle, lesions, new records, Glossina 5659
cuticles, chemical composition, resulin, Myrmecocystus mexicanus 110.
ectocrine glands, defence secretions, Rhyacophila fuscula 3388
ganglia, α -aminobutyric acid transport, autoradiography localization, Periplaneta americana 8066.
gene expression, Ultrabithorax mutations, Drosophila 6272.
infestation, pathogens, Beauveria alba, Achaerana 3409.
injury, electrophysiological recording, Locusta 8915
integument, sex pheromone biosynthesis, Musca domestica 8095
motor activity, peristalsis, circulation, ventilation, Culicidae 5661
nerves, role, egg production, Rhodnius prolixus 5080
nuclear polyhedrosis virus infection, DNA biosynthesis, RNA biosynthesis, Bombyx mon 3398
nuclear polyhedrosis virus replication, pupae, Bombyx mon 5033.
nucleic acids, infection, nuclear polyhedrosis virus, Bombyx mon 3418.
rhythms, neurophysiology, molting behavior, Schistocerca 3278
segments, compartmentation, Drosophila melanogaster 921
sensors, modules, morphology, variation, taxonomy, Tingidae 8885
spines, morphology, pupae, Thyndopteryx ephemeraeformis 8877.
termini, morphology, Megascia, North America 2415
vibratory stimuli, communication, colonial characteristics, Vespa vulgaris, Vespa maculifrons 4645
- Abedus ovatus**,
digestive tract, histology, histochemistry 160
- Abeimochus esculentus**,
host plants, genetics, pest resistance, Amrasca biguttula biguttula 6934.
host plants, pest control, insecticides efficacy, Aphis gossypii, Amrasca biguttula biguttula 7683.
host plants, pest control, pesticides, Insecta 7706.
host plants, spatial distribution, aggregation, Amrasca biguttula biguttula 4529
- Aberanta**,
morphology, coloration, Chlosyne lacinia, USA, Texas 8042
morphology, Satyrus calanus falacer, USA, New Jersey 7276
- Abgallaspia lirioides**,
taxonomy, new species, morphology, USA, Louisiana 1637.
- Abies alba**,
damage, pests, Earonymia impossible, Earonymia grusa, Romania 6920.
dieback, population decline, role, infection, Dreyfusia, Germany, Fed. Rep. 8342.
- Abies amabilis**,
seedlings, pest control, insecticides, Adelges piceae 5302
- Abies balsamea**,
forests, infestation, mortality, Choristoneura fumiferana, Canada, Quebec 3036.
forests, pest control, biological control, Choristoneura fumiferana, Bacillus thuringiensis 8472
host plants, galls, Paradiplous tumefex 6805.
- Abies concolor**,
host plants, effects on pheromones biosynthesis, Ips paraconfusus 1786
- Abies fraseri**,
host plants, damage, pests, Minderus abietinus, USA, North Carolina 4336.
- Abies grandis**,
monoterpenes accumulation, infection, fungi transmission, Scolytus ventralis 8473.
stands, defoliation effects on, Orgyia pseudotsugata, USA, Idaho 3601.
feeding behavior deterrents, host plants, Pristiphora erichsonii 623
- Abies jeffersoni**,
identification, morphology, USA, Texas, Village Creek 4107.
- Abiesmomyia mosalis**,
benthos, Venezuela, Valencia L. 621.
- Ablation**,
accessory gland, ablation, hatchability, fertility, females, Cochliomyia hominivorax, Stomoxys calcitrans 1853.
antennae, sex determination, parasitoids, Pimplinae 7471.
corpora allata, effects on juvenile hormones biosynthesis, Diptera punctata 2580.
glands, prothorax, larvae, reproduction, lasers, Heteropeza pygmaea 250.
medial neurosecretory cells, brain, effects on corpora allata, vitellogenesis, Eurygaster egricaps 6590.
- Ablorus ciliocampae**,
parasitoids, infestation, eggs mortality, Malacosoma americanum 8314.
- Ablorus pumilus**,
new records, geographical distribution, Ethiopia 4881.
- Abortion**,
eggs, genes, lethality, Megoura viciae 6252.
- Abraconomorphus topali**,
new species, morphology, India 2393.
- Abrostola aciepladis**,
morphology, genitalia, Czechoslovakia 1723.
- Abrostola trigemina**,
morphology, genitalia, Czechoslovakia 1723.
- Abrostola tripilasma**,
morphology, genitalia, Czechoslovakia 1723.
- Absectation**,
leaves, host plants, mortality, herbivores, Insecta 5240.
- Absorption**,
insecticides, parathion, roots, crops 7747.
moisture, eggs, survival, Anacridium aegyptium 6849.
vapors, water balance, frontal bodies role, semiarid environments 977.
water, solutes concentration, frontal bodies, Arenivaga 7352.
water, vesicles, epibulium, Tomoceris, Orchesia villosa 3365.
- Absorption spectroscopy**,
polytene chromosomes, Drosophila melanogaster 760.
- Acacia**,
host plants, Uromycladum tepperianum galls, species composition, Lepidoptera 7557.
- Acacia baileyana**,
pollination, association, Pyrgoides hamadryas 9158.
- Acacia decurrens**,
hosts, new records, parasites, Xyleborus forficatus, India, Nilgiris 2088.
- Acacia ingramii**,
food plants, larvae, Australia, New South Wales 2093.
- Acanthinae**,
keys, morphology, British Isles 4946.
- Acalolepta luxuriosa**,
diapause induction, photoperiods changes, emergence, hatching 1094.
- Acamptocladius**,
synonymy, Phycoidella 4828.
- Acamptocladius dentolatus**,
taxonomy, morphology 4828.
- Acamptocladius reissi**,
new species, taxonomy, morphology 4828.
- Acamptocladius submontanus**,
taxonomy, morphology 4828.
- Acanthia bivittata**,
life history, immature stages, laboratories 1984.
- Acanalonia conica**,
abundance, seasonal variations, plantations, USA, North Carolina 1313.
life history, immature stages, laboratories 1984.
new records, range extension, geographical distribution, USA, Northeast 2367.
- Acanthinus chalcemeai**,
new species, West Indies 1612.
- Acanthinus trifasciatus**,
surveys, West Indies 1612.
- Acanthophilus heliathi**,
pests, damage, crop fields, Carthamus tinctorius 7779.
- Acanthodoryctes**,
morphology, keys 8057.
- Acanthodoryctes gilberti**,
morphology 8057.
- Acanthodoryctes morleyi**,
morphology 8057.
- Acanthomytilus hungaricus**,
new species, taxonomy, morphology, Hungary 2441.
- Acanthophrithus capaci**,
new species, taxonomy, morphology, Turkey 5545.
- Acanthoscelidae**,
identification keys, 3 species, Hungary 3932.
- Acanthoscelides**,
crowding, effects on sex pheromone, sexual behavior 4306.
eggs, morphology, identification, host plants 5641.
- Acanthoscelides caracalae**,
new species, morphology, taxonomy, Argentina 3186.
- Acanthoscelides clandestinus**,
synonymy, Bruchus multisignatus 3186.
- Acanthoscelides compus**,
new species, morphology, taxonomy, Argentina 3186.
- Acanthoscelides devriesi**,
new species, taxonomy, morphology 7162
- Acanthoscelides oblectus**,
crowding, effects on sex pheromone attractancy, males 5091.
eggs, ultrastructure, water balance 2499
oogenesis, antennae amputation effects on 5824.
sex pheromone, groups effects on attractancy, males 3544.
stored products pests, pesticide resistance 1068
- Acanthoscelides pallidipennis**,
new records, geographical distribution, Europe 3932.
- Acanthoscelides pigricola**,
new species, taxonomy, morphology 7162
- Acanthoscelides suaveolens**,
keys, Argentina 3186.
- Acanthoscelides zebratus**,
new species, taxonomy, morphology 7162.
- Acanthosoma denticauda**,
indole-3-acetic acid metabolism, gut 3311.
- Acanthosoma haemorrhoidale angustatum**,
indole-3-acetic acid metabolism, gut 3311
- Acanthotraustes brasiliensis**,
taxonomic revision, synonymy, Euscorpius flavicaudis 2392
- Acarales**,
ectoparasites, Mus musculus 513
- Acarapis woodi**,
infestation, hives, Apis mellifera, Mexico 6181
pests, apiculture, reviews 5945
- Acari**,
abundance, distribution, species diversity, population structure, orchards, Malus, USA, North Carolina 588.
abundance, herbicides effects on, nontarget organisms, soil 5259
abundance, paddy fields 5261
aggregation, pasture, environmental factors, Brazil, Amazonia 4425.
allergens, house dust, man 1371
allergic diseases, man 1374
amino acid biosynthesis, guanine, Dermacentor andersoni, Argas arboreus 8954.
antigens, house dust, food 2913.
association, seasonal variations, Dendroctonus frontalis, USA, Louisiana 4430
chemical control, pesticides, efficacy, comparative studies 680
cold tolerance adaptations, Antarctic 8102.
cold tolerance, physiology, polar environments 979.
diapause induction, photoperiods, predators, diets, carotenoids 4257.
disease transmission, ryegrass mosaic virus, disease control, aldicarb 1467.
ectoparasites, birds, new records, USA, Alaska 520.

- Acari, (continued)**
equipment, cages 793.
feeding behavior, habitat selection, ecological distribution, Netherlands.
Maarseveen 1 L. 5433.
food organisms, coloration, defense mechanisms, predation effects on, Pisces 6228.
forests, soil, population dynamics, abundance, community composition 6000.
house dust, sampling 4489.
infectious diseases, Norwegian scabies, development, man 3659.
intestinal parasites, *Zenaidura macroura*, *Zenaidura asiatica*, USA, Florida 3582.
mass rearing, leaves, methodology 2486.
new species description, Papua New Guinea 6.
parasites, abundance, Rodentia, Egypt, Arab. Rep. 3588.
parasites, check lists, Mammalia, New Zealand 1231.
parasites, infestation, *Peromyscus maniculatus* 2831.
parasites, infestation, *Trichosurus caninus*, Australia, New South Wales 6776.
parasites, public health 9263.
parasites, *Sorex cinereus*, *Sorex longirostris* 9149.
pest control, irrigation effects on, *Malus domestica* 1385.
pests, species composition, *Manihot esculenta* crop fields, USA, Florida 4555.
pests, surveys, Senegal 9285.
range extension, Rodentia parasites, Canada, Quebec 4386.
sampling, instruments, methodology 1683.
soil fauna community structure, population density, factors affecting, crop fields, India, Varanasi 4443.
soil fauna, forests, community composition, environmental factors, India, Kashmir 7009.
stored products pests, chemical control, fumigants 1045.
supercooling, cold hardiness, Antarctic 3364.
toxicity testing, avermectins 4214.
- Acaricides,**
chemical control, parasites, cattle, *Boophilus microplus* 5278.
cyclopropane, bioassays, *Panonychus ulmi*, *Panonychus citri*, *Tetranychus urticae*, *Tetranychus kanzawai*, *Tetranychus desertorum* 7398.
efficacy, ivermectin injection, cattle, *Amblyomma americanum* 4506.
insecticides, malathion, diazinon, ethyl parathion, fenitrothion, efficacy, *Tetranychus telarius* 7794.
ivermectin, systems, efficacy, *Amblyomma americanum* 9268.
milbemycin, antibiotics, *Streptomyces hygroscopicus aureolacrimosus*, pest control, *Tetranychus urticae*, *Panonychus citri* 5309.
pest control, coumaphos, Bay Vb 9328 Flowable, cattle, *Boophilus microplus*, *Boophilus annulatus* 4509.
pest control, tick-borne encephalitis virus, disease transmission, *Ixodes persulcatus* 9252.
phthalate, efficacy 7404.
thioisofuranolones, topical application, penetration, metabolism, *Diatraea grandiosella* 4232.
- Acaridae,**
morphology, taxonomy, Tunisia 2385.
- Acarina,**
abundance, parasites, *Phalacrocorax auritus*, USA, Florida 5948.
association, abundance, *Lepidosaphes beckeri*, *Aonidiella auranti*, Egypt 6877.
chemical control, pesticides efficacy 294.
food organisms, anti-predator behavior, *Notophilus biguttatus* 498.
infestation, weeds, *Gossypium*, Egypt 6974.
leaf litter, seasonal variations, environmental factors, Brazil, Restinga de Marica 5219.
nests entomofauna, *Micromys minutus* 460.
new records, morphology, taxonomy, India, Bihar 4765.
parasites, aquatic organisms, lakes, Insecta, India 7022.
parasites, new records, species composition, Chiroptera, USA, Michigan 7550.
predator-prey interactions, soil properties effects on 5254.
predator-prey dynamics, population dynamics, age composition, mathematical models 7596.
stored products pests, atmospheric conditions effects on 1395.
vectors, Rocky Mountain spotted fever, Rickettsia, Mammalia, USA, California 1321.
- Acartophthalmus nigritinus,**
new records, geographical distribution, Eire 7889.
- Acarus farris,**
infestation, stored products, environmental conditions, relative humidity, Triticum 8513.
- Acarus siro,**
allergens, house dust, man 1371.
enzymatic activity, lysozyme 1764.
infestation, stored products, environmental conditions, relative humidity, Triticum 8513.
pest control, stored products, air flow 6092.
stored products pests, chemical control, fumigants 1045.
stored products pests, effects on food quality 1202.
stored products pests, infestation, environmental effects, Triticum 7693.
- Accessory gland,**
anatomy, histology, *Calpodius ehilus* 9040.
development, secretion, juvenile hormones, females, *Schistocerca gregaria* 2672.
epididymal duct, histology, *Stomoxys calcitrans* 5063.
males, juvenile hormones biosynthesis, *Hyalophora cecropia* 968.
maturation, secretions, *Glossina morsitans* 354.
protein biosynthesis, *Rhodnius prolixus* 3375.
reproduction, ablation, hatchability, fertility, females, *Cochliomyia hominivorax*, *Stomoxys calcitrans* 1853.
reproduction role, spermatogenesis, *Stomoxys calcitrans* 8241.
reproductive organs, development, *Schistocerca gregaria* 5062.
secretions, effects on oviposition, mating behavior, *Drosophila melanogaster* 5858.
spermatogenesis, maturation, *Ixodidae* 4282.
ultrastructure, cytology, *Dysdercus fasciatus* 3454.
ultrastructure, proteins, secretions, characterization, *Drosophila funebris* 8118.
- Acclimation,**
cold hardiness, *Cryptophagus antarticus*, *Panorisma octoculata*, Antarctica, Signy I. 6583.
cold hardiness, *Nanorchestes antarticus*, *Alaskozetes antarticus*, *Stereocydeus villosus*, *Gamassella racovitzai*, Antarctica, Signy I. 6579.
cold tolerance, metabolism, respiration, Belgium antartica 8107.
cold tolerance, overwintering, metabolism, Eurosta solidaginis 4254.
digestive enzymes, enzymatic activity, temperature effects, *Periplaneta americana* 3372.
- Acclimation, (continued)**
overwintering, metabolism, enzymatic activity, temperature effects, Eurosta solidaginis 4255.
temperature, environmental effects, feeding, *Cryptotermes* 5128.
temperature tolerance, habitat preferences, *Cryptotermes* 1191.
- Acclimatization,**
cold hardiness, *Rhynchaenus fagi* 1792.
ecophysiology, migrations, *Leptinotarsa decemlineata* 7608.
- Accumulation,**
monoterpenes, infection, fungi transmission, *Scolytus ventralis*, *Abies grandis* 8473.
- Acestropus niveus,**
new records, geographical distribution, Switzerland, Geneva I. 779.
- Acephala,**
toxicity, *Colophora laricella* 5782.
toxicity, effects on esterase polymorphism, *Chironomus occidentalis* 8202.
toxicity, larvae, streams, Insecta 315.
- Acer rubrum,**
host plants, life cycle, *Coccophaps sanguinarius*, *Lygocoris viticolis*, USA, Pennsylvania 5902.
- Aceria alpina,**
new records, geographical distribution, Sweden, Abisko 4713.
- Aceratimon majus,**
chemoreceptors, sensilla, ultrastructure 3287.
- Aceria choondriale,**
infestation effects on growth, weed control, *Chondrilla juncea* 9278.
- Aceria litchii,**
pests, abundance, pest control, India, Bihar 7698.
- Acerophagus notativentris,**
parasites, infestation, pest outbreaks, *Pseudococcus maritimus*, *Pyrus communis*, USA, Washington 8498.
- Acetates,**
sex pheromone, efficacy, pest control, *Euxoa ochrogaster* 742.
- Acetic acid,**
effects on oviposition rhythms, *Drosophila melanogaster* 2749.
nutrient utilization, stress, *Drosophila* 8075.
- Acetobacter,**
association, *Apis mellifera*, bees 8310.
- Acetone,**
attractancy, odors, *Glossina morsitans morsitans*, *Glossina pallidipes* 6084.
p-N-Acetyl-D-glucosaminidase, characterization, hemolymph, *Bombix mori* 7282.
- Acetylation,**
actin, embryo cells, cell lines, *Drosophila* 184.
- Acetylcholine,**
biosynthesis, release, tyrotoxin effects on, brain, rats, *Titus serrulatus* 8180.
distribution, nervous system 1736.
nervous system, *Musca domestica*, *Acheta domestica*, *Camponotus* 1735.
receptors, characterization, purification, *Musca domestica* 899.
- Acetylcholine receptors,**
presynapse, neuromuscular junctions, characterization, *Schistocerca gregaria* 1984.
- Acetylcholinesterase,**
activity, head, thorax, abdomen, *Dicus cucurbitae* 7323.
activity, pesticide resistance, pyrethroid, *Musca domestica* 5792.
biochemical analysis, *Apis cerana indica* 4996.
central nervous system, characterization, activity, inhibition, *Apis cerana indica* 2560.
enzyme activity, circadian rhythms, *Periplaneta americana* 154.
enzymatic activity, pesticides effects on, toxicity, correlation analysis, *Aphis citricola* 1064.
isoenzymes, biochemical analysis, distribution, *Culex tarsalis* 189.
photoreceptors, histochemistry, eye, *Apis mellifera* 3299.
- N-Acetylglucosamine,**
biosynthesis, nervous system, *Schistocerca gregaria* 1734.
nervous system tissues, ganglia, *Periplaneta americana* 128.
- p-N-Acetylglucosaminidase,**
secretion, enzymatic activity, cell lines, *Culex quinquefasciatus*, *Drosophila melanogaster*, *Trichoplusia ni*, *Aedes pseudoscutellans* 96.
- 2-Acetylpyridine thiosemicarbazones,**
topical applications, toxicity, molting inhibition, *Oncopeltus fasciatus* 5786.
- Acheia janata,**
feeding, food utilization, insecticides effects on, *Racmus communis* 7412.
new records, host plants, *Arachis hypogaea* 6800.
pest control, toxicity, *Bacillus thuringiensis thuringiensis*, *Bacillus thuringiensis kurstaki* 7384.
susceptibility, pathogenicity, *Bacillus thuringiensis* 7378.
- Acheilera,**
pathogens infestation, abdomen, *Beauveria alba* 3409.
- Acheta,**
epithelia, neurons, sensors, electric currents 2528.
- Acheta domestica,**
acetylcholine, nervous system 1735.
20-hydroxyecdysone effects on sexual reproduction, fecundity 5820.
- Acheta domestica,**
brain neurosecretion, ovary development effects on 984.
chemical composition, fatty acids, genital tract 198.
circadian rhythms, locomotor activity, pacemakers transplantation 6527.
diets effects on fecundity, growth, ruin 3484.
diets, linoleic acid, effects on spermatogenesis 1121.
lipid metabolism, linoleic acid biosynthesis 6564.
oviposition, factors affecting, stereotyped behavior, substrate preferences 8255.
oviposition, neurophysiology, motor activity 4266.
social environment effects on food consumption, growth 8275.
visual perception, visual preferences, conditioning 7500.
- Acheta domesticus,**
circadian rhythms, enzymatic activity, insecticides, phorate 1794.
- Achipteria bolomoensis,**
morphology, population dynamics, diets 6002.
- Achoea janata,**
larvae, body weight, hemolymph, pathogens, *Bacillus thuringiensis* 2644.
leucine kinetics, hemolymph 2559.
leucine metabolism, kinetics, hemolymph 4988.
- Achoea janata,**
Corpora allata, neurosecretion, physiology, developmental stages 4176.

- Achras zapota**,
host plants, new species, *Anarsia achrasella*, India 2465.
- Achroa griseola**,
host-parasite interactions, population growth, *Bracon hebetor* 1227
- Achryson**,
taxonomy, morphology, keys 6362.
- Achryson meridionale**,
new species, taxonomy, morphology, Brazil 6362
- Achryson peracchi**,
new species, taxonomy, morphology, Brazil 6362
- Acia lineatiformis**,
morphology, pests, South Africa, Western Cape Region 4944.
- Acid rain**,
pollution effects, occurrence, streams, *Siphonurus lacustri*, *Heptagenia lateral*, British Isles, Scotland 8607.
- Acidity**,
eutrophication, community composition, Chironomidae, New Zealand, Opal L. 1485.
- Acids**,
deterrents, biochemical analysis, infestation, *Schizaphis graminum*, Gramineae 532.
- Acigona stenelus**,
biological control, parasites, *Sturmioptis inferens* 1216.
- Acilius semialbatus**,
predation effects on vertical distribution, abundance, *Daphnia pulex* 5438
- Acturina**,
niche pattern, life history, galls, host plants, *Chrysothamnus* 6792
- Aclerda arundinariae**,
taxonomy, males morphology 6424
- Acleridae**,
taxonomy, males morphology 6424
- Acleris flimbriata**,
synonymy, *Teras pulverana*, *Acleris boscana*, Finland 7222.
- Acleris glovera**,
pest outbreaks, species composition, life cycle, USA, Idaho 5889.
- Acleris gloverana**,
pest outbreaks, abundance, life cycle, USA, Idaho 9305.
- Acleris lacondairana**,
synonymy, *Teras longulana*, *Acleris notana*, Finland 7222.
- Acleris maccana**,
geographical distribution, new records, USA, Virginia 3161.
- Acleris obtusana**,
morphology, geographical distribution, Finland 7222
- Acleris obtusana fuscana**,
morphology, Finland 7222
- Acleris obtusana obtusana**,
morphology, Finland 7222
- Acmonopolyntema immaculatum**,
new species, taxonomy, morphology, North America 2457
- Acmonopolyntema misianense**,
new species, taxonomy, morphology, North America 2457.
- Acmonopolyntema misana**,
new species, taxonomy, morphology, North America 2457.
- Acmonopolyntema uma**,
new species, taxonomy, morphology, North America 2457
- Acnesia**,
new species, taxonomy, morphology, keys 8794
taxonomy, morphology, geographical distribution 6402
- Acnesia amoena**,
taxonomy, morphology 6402.
- Acnesia longipes**,
taxonomy, morphology 6402.
- Acnesia nitidicollis**,
taxonomy, morphology 6402
- Acronitum columbianum**,
flowers, foraging behavior, energy intake optimization, *Bombus*, USA, Rocky Mts 4345
- Acronophora flavipes**,
interspecific relationships, mutualism, *Trigona hyalinata* 6750
- Acroclawes subfuscipennis**,
defence secretions, biochemical analysis 3380.
- Acronus gramineus**,
extracts, pest control, efficacy, *Bagrada cruciferarum* 7682.
- Acoustic communication**,
reproductive behavior, reproductive isolation, *Schizocosa ocreata*, *Schizocosa royeri* 3541.
song, computer applications, *Cystosoma saundersi* 1159.
- Acoustic responses**,
evolution, auditory perception, predators echolocation, Chiroptera, Lepidoptera 5158.
stridulation frequency, neurons, cerci, song, *Gryllus campestris* 4972.
tympanum, auditory perception, echolocation, predators, Chiroptera, Lepidoptera 4975.
- Acoustics**,
communication, sound production, stridulation, *Corixidae* 8615.
- Acraea alciopae**,
morphology, taxonomy 1658.
- Acraea aurivillii**,
morphology, taxonomy 1658.
- Acraea encedon**,
population structure, sex ratio, polymorphism, population genetics 7056.
- Acrididae**,
chromosomes, structure 5465.
culture collections parasites, chemical control, *Malameba locustae* 1002.
digestive tract, water uptake, ion exchange 239.
ear, auditory perception, mechanical properties, tympanum 4976.
effects on grasslands community composition, USSR, Kazakhstan 589.
embryogenesis, growth, peripheral nerves, central nervous system 332.
embryogenesis, peripheral nerves, axons growth, central nervous system 333.
feeding, predictions, crop protection, USA, Montana 4634.
flight activity, orientation, flight muscle spikes 150.
flight activity orientation, ocelli effects on 149.
hemolymph, hemagglutination 3307.
hosts, parasites dispersal, *Scelio fulgidus* 4451.
infection methodology, pathogens, *Entomophaga grylli* 5627.
metathoracic fast extensor tibiae motor neurons, structure, comparison, *Gryllidae* 8909.
- Acrididae, (continued)**
neuromuscular junctions, ultrastructure 4121.
pest control, pathogens, bailing 1398.
pesticide residues, insecticides, permethrin, fenvalerate, chromatography, GLC 1833.
photoreceptors, diurnal variations, ultrastructure, sensitivity 147.
population density, species diversity, outbreaks, vegetation patterns, USA, Arizona 6050.
population dynamics, biomass, seasonal variations, feeding, production, South Africa 8365.
research programs, pest control, crops, West Africa 681.
- Acridioidea**,
community composition, ecological distribution, biogeography, China, People's Rep. 4450.
taxonomy, morphology, South America 1671.
- Acridomorpha**,
morphology, geographical distribution, new records, West Africa 4747.
- Acridomorphoidea**,
surveys, geographical distribution, Gambia 780.
- Acridotheres ginginianus**,
predators, pest control, *Musca domestica*, India 7681.
- Acrithochaeta**,
new species, 2 species, morphology, taxonomy, India 822.
pests, host plants association, Gramineae, India 4557.
- Acrithus deharvengi**,
new species, morphology, New Guinea 2393.
- Acrithus erimae**,
new species, morphology, New Guinea 2393.
- Acrocera globulosa**,
new records, geographical distribution, Ireland 4706.
- Acroleptidae**,
males, sex pheromone, organic compounds, attractancy 2592.
- Acroleptopsis assectella**,
attractants, host plants, biochemical analysis, *Allium porum* 1240.
egg laying, chemical perception, host plants 1158.
mating behavior, circadian rhythms, adaptiveness 4289.
mating behavior, circadian rhythms, geographical variations, Sweden, France, Spain, Algeria 5107.
- Acromyrmex**,
swarming behavior, aggression, pheromones, workers 4651.
- Acromyrmex landolti fracticornis**,
habitat selection, substrate preferences, fungi, colonial characteristics 6221.
- Acromyrmex octospinosus**,
bait, chemical control, toxicity 2981.
- Acronycta euphorbiae**,
occurrence, abundance, British Isles, Scotland 6705.
- Acrosternum hilare**,
chemical control, pest control 3763.
overwintering behavior, ecological distribution, USA, South Carolina 455.
- Acrotichis insularis**,
new records, geographical distribution, Finland 7897.
- Acrotichis intermedia**,
life cycle, oviposition, development, temperature effects 2686.
- Acrotivus insularis**,
development, mortality, diets effects on 2693
- Actin**,
acetylation, embryo cells, *Drosophila* 184.
cell lines chemical composition, 20-hydroxyecdysone effects on, *Drosophila* 168.
- Actinocephalus ellipsoidus**,
new species, parasites, *Ischnura delicata* 2627.
- Action potential**,
litoral, taurine, γ -D-glutamyl-L-aurine effects on cardiac muscle, *Locusta migratoria* 241.
muscles, sound production (biological), *Cyclochila australasiae*, *platyleura capitata* 264.
skeletal muscle fibers, calcium requirements, *Carassius morosus* 111.
sodium currents, *Periplaneta* axons, *Buthus judaicus* venom toxins effects on 8182.
- Activation**,
baculovirus infection, Spodoptera, *Heliothis* 2619.
diapause, neurosecretion, brain cells, *Calliphora vicina* 6639.
flight muscle, neurophysiology, *Insecta* 1733.
nucleolus organizer region, chromosomes, hybrids, *Drosophila* 5452.
transcription, heat shock genes, *Drosophila* 1506
- Active transport**,
potassium, digestive tract, *Hyalophora cecropia* 2544.
potassium, midgut, thallium inhibition, *Hyalophora cecropia* 8074.
- Activity**,
ATP pyrophosphatase, malpighian tubules, inhibitors activity, *Locusta migratoria* 2572.
digestive tract, measuring techniques, *Semidalia innotata* 2545.
distribution, morphology, Laphria, Nepal, Milke Danda Ridge 7615.
esterase, pesticide resistance, pesticides (organophosphorus), *Tetranychus kanzawai* 7407.
host searching behavior, seasonal variations, *Culex salinarius* 660.
juvenile hormones, synthesis, *Musca domestica*, *Culex pipiens pallens* 2581.
monoterpenoids, alarm pheromone, alarm behavior, *Tyrophagus putrescentiae* 7339.
night, equipment, cameras, *Insecta* 3247.
reproductive strategy, energetics, *Collembola* 6843.
seasonal variations, larvae, *Ctenicera destructor*, *Hypophius bicolor* 56.
sex pheromone mimics effects on, *Periplaneta americana* 1923.
- Activity patterns**,
abundance, agricultural ecosystems, *Labidura riparia* 2163.
abundance, Arachnida, USA, New Mexico 1953.
abundance, species composition, Simulium, West Africa 3630.
aggregation behavior, *Episcada hymenaea*, Paraguay 7589.
atmospheric conditions effects on, gases, *Ornithonyssus* 1937.
attractants effects on, traps, *Glossina morsitans morsitans*, *Glossina pallidipes*, Zimbabwe 3670.
breeding status, gravid, virgin, females, *Glossina morsitans morsitans* 5851.
Ceratopogonidae, China, People's Rep. 1575.
circadian rhythms, environmental effects, *Blattella orientalis* 9079.
circadian rhythms, *Periplaneta americana* 4985.
colonial characteristics, nesting behavior, *Vespa consobrina* 6220.
colonies, larvae, *Malacosoma amercanum* 5142.
defensive behavior, coloration, sound production, *Sipylodes sipylus* 6733

Activity patterns, (continued)

- diel variations, burrowing behavior, *Geococca domifera* 1186
 diel variations, *Earias vittella*, *Diactynia obliqua*, *Spodoptera litura*, *Heliothis armigera*, *Chilo partellus*, India 9100
 diel variations, seasonal variations, body temperature, weather, Tenebrionidae, USA, Washington 8274
 Diplopoda, German Dem. Rep., Thuringia 7588
 diurnal variations, allopatric populations, geographical variations, temperature, *Glossina pallidipes*, Kenya 7525
 diurnal variations, mangrove swamps, Culicoides, USA, Florida 4419
 diurnal variations, measuring techniques, *Thanasimus dubius* 1742
 environmental effects, *Apy melifera* 452
 flight activity, *Rhopalosiphum padi* 3562
 foraging behavior, males, *Plebeia dorydora* 9362
 habitat, Apocera, Rhamphomidas 538
 habitat preferences, photokinesis, *Tribolium castaneum*, *Tribolium confusum* 2787
 host searching behavior, Medicago host plants effects on, *Hypera postica* 2055
 host searching behavior, population density effects on, *Venturia caescentis* 3652
Isodes ovatus 458
 larvae, grasslands, *Hemileuca olivae*, USA, New Mexico 3653
 life cycle, predation, *Coniopyx esbenpeterseni* 6847
 light effects, humidity, *Phlebotomus*, Yugoslavia 2766
 livestock, pests effects on, *Haemaphysa irritans* 3688
 males, pheromones effects on, interspecific relationships, *Dictyoploca japonica*, *Philaenaria cyathus* 2761
 males, sex pheromone attractancy habituation, *Trichoplusia ni* 2763
 mating behavior, *Apanetes glomeratus* 2740
 mating behavior, dispersal, feeding behavior, *Batocera lineolata* 2789
 mating behavior, display, *Eldana saccharina* 1906
 mating behavior, oviposition, *Dioryctera amatella* 1914
 measuring techniques, data acquisition, computer applications, microcomputers 4914
 measuring techniques, instruments, Insecta 1685
 molting, eclosion hormone role, *Manduca sexta* 7431
 mutualism, myrmecophily, plant communities guilds, Formicidae, USA, West Virginia 2837
 night, *Apy melifera*, USA, New York 8287
 occurrence, cattle, *Amblyomma*, Argentina 9265
 periodicity, Culicidae, Brazil 4498
 polymorphism, behavior, colonial characteristics, larvae, *Malacosoma americanum* 9359
 prey, Parulidae predators, Insecta 4421
 reproduction, mortality, plantations, *Pissodes strobi* 2161
 resource utilization, sympatric populations, *Lepidomyces* 2900
 rhythms, motivation, *Varroa jacobsoni* *oudemans* 9089
 sand flats, diurnal variations, seasonal variations, *Dasyneutella*, USA, Michigan 7518
 seasonal variations, forests, Carabidae, USSR 6716
 seasonal variations, parasites, domestic animals, *Isodes scapularis* 6890
 seasonal variations, parasites, *Isodes matoi*, *Mammalia*, Zimbabwe 519
 seasonal variations, population density, Coleoptera, India, West Bengal 5256
 seasonal variations, Scarabaeidae, India 5255
 seasonal variations, *Sitona hispidulus*, USA, Kentucky 1277
 seasonal variations, Tenebrionidae, USA, New Mexico 8284
 sex pheromone effects on, *Lymantria dispar* 5013
 social organization, colonial characteristics, *Mallo gregalis* 9354
 species composition, Haliidae, Austria, Innsbruck 6817
 species composition, pests, soil, Insecta, India, Dharwad 5366
 species diversity, ecological distribution, abundance, Diptera, Canada, Ontario, Salem Creek 3856
 stereotyped behavior, molting, *Rhodnius prolixus* 4340
 swimming behavior, *Easifera* 5154
 temperature effects on, *Formica neoclara*, USA, Colorado 6863
 thorax, *Tetracyclus borealis* 2452
 winter temperature effects on, *Dermatecton varianalis* 7587
- Actornithophilus gracilis**,
 parasites, new records, *Vanellus vanellus*, Spain 8334
- Acausa**,
 new species, taxonomy, morphology, South America 7984
- Aculops betoniacae**,
 new species, taxonomy, morphology, India 7133
- Aculops niphoeciidae**,
 new records, geographical distribution, India 7137
- Aculus**,
 nontarget organisms, diflubenzuron effects on, pest control, *Laspeyresia pomonella* 8562
Aculus schlechteri,
 chemical control, pesticides, efficacy, comparative studies 680
 predator-prey interactions, *Amblyseius fallacis* 560
 stored products pests, atmospheric conditions effects on 1395
- Acanuiochernes**,
 synonymy, *Phobococherus* 5552
- Acute toxicity**,
 acaphate, food chains, *Phytoseiulus persimilis*, *Tetranychus urticae* 309
 dieldrin, metabolites, *Blaberus discoidalis* 301
 endosulfan, *Enallagma* 292
- Acyrtophis**,
 hyperparasitism, *Dendrocybus* 4382
 pests, effects on host plants chemical composition, *Medicago sativa* 540
 population density, damage, host plants pest resistance, *Medicago sativa* 2256
- Acyrtophis gonyptili**,
 diel activity, vertical migrations, spatial distribution, host plants 6717
- Acyrtophis kondoii**,
 effects on, growth, seedlings, parasite resistance, *Medicago sativa* 549
 growth, fecundity, survival, host plants, *Medicago sativa* 6944
 host preferences, food plants, *Leguminosae* 6945
 infection, factors affecting pathogens sporulation 2646
 pest control, host plants, cultivars, *Medicago sativa* 3801
 pests, effects on crop yield, *Medicago sativa* 3774
 pests, effects on host plants chemical composition, *Medicago sativa* 540
 population density, damage, host plants pest resistance, *Medicago sativa* 2256
 predator-prey interactions, foraging behavior, *Chrysopa carnea*, *Hippodamia convergens* 2870
 sampling methodology, crop fields, efficiency 4071
- Acyrtophis magnoliae**,
 rRNA 5S, nucleotide sequence, thermal stability, secondary structure, comparison,
- Acyrtophis magnoliae**, (continued)
 Bombyx, *Drosophila* 4686
- Acyrtophis pium**,
 abundance, movements, agricultural practices effects on, crop fields 6198
 avoidance behavior, host plants, alarm pheromone, pest control 7337
 bioassays, insecticides, field trials, electronic equipment, incubation 8015
 developmental stages, RNA biosynthesis, protein biosynthesis 934
 disease resistance biotypes, susceptibility, pathogens, *Erynia neoaphidis* 8128
 disease transmission, pea enation mosaic virus 8488
 feeding, substrate preferences, competition, *Aphis fabae* 5925
 food organisms, predators 1197
 host preferences, food plants, *Leguminosae* 6945
 hosts, pathogens, *Conidiobolus obscurus* 2621
 hosts, population density, effects on parasites longevity, fecundity, *Aphelinus semiflavus* 8318
 hosts, reproductive organs, parasitoids infestation effects on, *Aphidius smithi* 6774
 parasites, *Aphidius eadyi*, New Zealand, Helensville 506
 pest control, chemosterilants 4575
 pest control, host plants resistance, cultivars, *Medicago sativa* 3801
 pests, effects on crops, *Medicago sativa* 6970
 pests, effects on host plants chemical composition, *Medicago sativa* 540
 plant diseases transmission, bean yellow mosaic virus, *Phytophthora*, *Tribolium* 8524
 population density, damage, host plants pest resistance, *Medicago sativa* 2256
 population dynamics, predator-prey interactions, biological control, predation 2866
 predator-prey interactions, feeding behavior, egg production, temperature effects, *Coccinella californica*, *Coccinella trifasciata* 2875
 predator-prey interactions, food consumption, *Coccinella* 2875
 predator-prey interactions, foraging behavior, *Chrysopa carnea*, *Hippodamia convergens* 2870
 predator-prey interactions, foraging behavior, hunger, abundance, *Coccinella californica* 2872
 predator-prey interactions, population density, population dynamics, environmental effects, *Coccinella* 2866
 predator-prey interactions, population dynamics, movements, *Coccinella californica*, *Coccinella trifasciata* 2875
 predator-prey interactions, predators, sexual reproduction, life cycle, *Coccinella* 2871
- Adalia bipunctata**,
 feeding behavior, host plants leaves morphology effects on 5959
 growth, development, fecundity, feeding, temperature, predation, mathematical models 2818
 natural enemies, pests, abundance, *Pseudaulacaspis pentagona* 6089
 predators behavior, cannibalism, prey abundance, predator-prey interactions, *Eucallipterus tiliae* 8298
- Adanysia coelestis**,
 new species, taxonomy, morphology, Pakistan 7150.
- Adaptation**,
 aquatic environments, parasites, asexual reproduction, *Entomophthora conica*, *Entomophthora ricini*, Insecta 1009
 cold tolerance, Azar, *Collembola*, Antarctica 8102
 cold tolerance, alpine environments, Insecta, Canada 8103
 cold tolerance, biochemistry, Insecta 456
 cold tolerance, freezing, Insecta, Antarctica 2730
 cold tolerance, survival, polar environments, Insecta, Canada 980
 competition, morphology, competitive behavior, *Podischnus agenor* 4423
 diapause, parasitoids, geographical variations, *Leptopilina boulardi*, *Drosophila melanogaster* 6617
 ecological distribution, intertidal environment, *Aepus marinus*, *Aepus robin*, British Isles Coast 5230
 feeding, predatory behavior types, ecological distribution, Carabidae, Italy 4446
 host plants association, oviposition, *Callosobruchus maculatus* 1248
 life cycle, tundra, *Tipula carniifrons* 9111
 life history, host plants flowering, *Schima mits*, *Pyrrhopygus* 6790
 light, eye, *Romalea macroptera* 148
 light, photoreceptors physiology, *Apy melifera* 6534
 littoral zone habitat, reproductive strategy, freshwater environments, *Scatella picea* 6861
 migrations, ecophysiology, *Leptinotarsa decemlineata* 7608
 parental behavior, brood care, protection, environmental conditions, *Euscoryphus* 5108
 phenology, population studies, *Diatraea grandiosella* 6831
 phenotypes, canalization, *Nymphalis antiopea hyperborea* 7878
 photoreceptors, response, light intensity, *Locusta migratoria*, *Valanga uregulana*, *Calliphora stygia* 4969
 reproduction, herbivory damage, *Lepidoptera* larvae, *Juncea mollis* 9164
 respiratory system anatomy, deserts, *Menacanthus ovalis* 8924
 sexual reproduction, geographical variations, *Scota setigerum* 1861
 survival, colonial characteristics, *Polistes exclamans* 3045
 host specificity, pest control, Insecta, *Glycine max* 707.
- Allogeneic evolution**, Insecta 775
- Adaptiveness**,
 circadian rhythms, mating behavior, *Acrolepiopsis assectella* 4289
 copulation time, breeding success, *Nezara viridula* 1898
 fitness, slavery, *Formicidae* 1478
 gene frequency, *synonymy*, *Drosophila* 5451
 larvae aggregation, effects on survival, *Pryera sinica* 1192
 larvae diapause, *Aedes triseriatus* 348
 parasitoids effects on hosts survival, *Euphydryas phaeton* 1220
 protandry, diapause, pupae, *Lepidus sinapis* 5890
 senescence, genotypes, *Drosophila melanogaster* 1508
- Adactynus**,
 morphology, new records, geographical distribution, India 7275
- Adactynus cupreus**,
 morphology, new records, geographical distribution, India 7275.
- Adelges piceae**,
 chemical control, insecticides, seedlings, *Abies amabilis* 5302.
- Adenosinetriphosphatase**,
 hydrolysis [B-12-furyl]-acetyl phosphate, cell surface membranes, embryos, *Manduca sexta* 4949

- Adenylate cyclase**, biochemical characteristics, identification, reviews, *Insecta* 5682
enzymatic activity, brain, diapause, *Hyalophora cecropia*, *Antheraea pernyi* 124
enzymatic activity, fat body, development, *Bombyx mori* 3509
localization, tissues, *Locusta migratoria* 930
monoamine, guanylnucleotides, nervous system, *Schistocerca gregaria* 6526
octopamine effects on activity, hemolymph, *Malacosoma distria* 8976
regulation, plasma membranes, brain, *Ceratitis capitata* 8091
- Adherence**, leucocytes (granulocytic), temperature, hemolymph, effects on, *Bombyx mori* 8073
- Adhesives**, traps, efficacy, *Insecta* 50
- Adinopsia braziliensis**, morphology, taxonomy 3181
- Adinopsia cuspidata**, new species, morphology, taxonomy 3181
- Adinopsia pubescens**, new species, morphology, taxonomy 3181
- Adisura atkinsoni**, nuclear polyhedrosis virus infection, symptoms 290
pest control, *Bacillus thuringiensis* 1836
- Adjuvants**, effects on toxicity, nuclear polyhedrosis virus, *Heliothis zea* 3450
feeding, Coax, Gustol, biological control, *Heliothis* 9274
feeding, pest control, biological control, *Heliothis* 4605
pathogens, pest control, efficacy, *Trichoplusia ni*, *Heliothis zea* 8457
- Adolopia**, purification, characterization, venom, *Apidae* 8181
- Adoretus tessellatus**, chemical control, insecticides, isazobpos, larvae 5405
- Adoryphorus coenali**, life history, geographical distribution, New Zealand 453
- Adozophyes**, kauremones, eggs, host searching behavior, oviposition, *Ascogaster reticularis* 7485
sexual reproduction, breeding success, fecundity, eggs hatchability 1851
diurnal variations, flight patterns 52
flight activity, diurnal variations, measuring techniques, pheromone traps 472
- Adriamycin**, use, clastogenicity methodology, embryos, *Chortophaga viridifasciata* 9412
- Adsorption**, diet, potato virus Y, tobacco mosaic virus, *Myzus persicae* 3416
fluids, midgut, diuretic, *Tabanus prolixus* 5679
proteins, oocytes, vitellogenesis, *Locusta* 2715
water vapors, water balance, *Arenivaga invaginata* 1793
water vapors, water balance, *Psocoptera* 3366
- Adults**, abundance, sampling, *Agromyza frontella* 3238
aggregation pheromone, dispersion pheromones, effects on larvae, *Blattella germanica* 1161
biology, predation, *Microdon fuscipennis* 2778
body size, degradation effects on, reproduction, nest building, *Onthophagus gazella* 2897
body size, degradation effects on, reproduction, nest building, *Onthophagus gazella* 2897
check lists, flight activity, *Trichoptera*, USA, Pennsylvania, Linesville Creek 7027
diapause, sex differences, seasonal variations, *Danaus plexippus* 350
dye weight, pupae, mathematical analysis, *Choristoneura fumiferana* 7260
duration, life span, dispersal, *Pieris rapae crucivora* 4325
ecological levels, *Gryllus bimaculatus* 8093
eggs, molting, temperature effects, pupae, *Ephesia cautella*, *Plodia interpunctella* 1874
fecundity, survival, pupae mass effects on, *Aedes aegypti* 5895
feeding, pest resistance, cultivars, *Lissorhoptrus oryzophilus*, *Oryza sativa* 6129
flight activity, *Plecoptera*, USA, Oregon 6729
growth regulators, *BAV* 8514, effects on sterility, *Musca domestica* 8237
juvenile hormones, *Leptinotarsa decemlineata* 4164
juveniles, aquatic organisms, physiology, morphology, flight activity, *Insecta* 1486
larvae, morphology, *Tabanidae* 1584
larvae, morphology, taxonomy, keys, *Pyrastinus* 844
longevity, *Culex* larvae 456
longevity, flight activity, pupae storage, temperature effects, *Cochliomyia hominivorax* 1868
longevity, genetic factors, mutants, *Drosophila* 5057
morphology, *Aradus foliaceus*, *Aradus mirabilis* 8032
morphology, identification, *Icerya purchasi* 1722
morphology, identification, vectors, *Simulium squamosum* 869
morphology, *Kallitambinia australis* 866
morphology, *Parasarcophaga reposita* 4927
morphology, sex determination, *Phlebotrius liminaris* 2508
morphology, *Simulium sanguineum* 3252
morphology, *Sminthurus floridanus*, USA, South Carolina 4943
morphology, *Smittia lasiops* 8031
morphology, *Synopacma vinella* 4925
morphology, taxonomy, *Dysdera concinna* 6504
new species, *Porticoendyla ramadei*, France, Midi-Pyrenees 817
parasites, morphology, *Freyana anatina anatina* 8030
parasites, morphology, *Tyroborus lini* 8029
pests, stored products repellents effects on, *Insecta* 711
population dynamics, spatial distribution, seasonal variations, forests, *Monochamus alternatus* 4428
removal experiments, interspecific competition, *Elodea obscura*, USA, New Mexico 2137
sampling methods, *Spenophorus parvulus* 8867
sexual dimorphism, body size, *Sesamia inferens* 863
taxonomy, morphology, courtship, *Epicauta caustica*, *Epicauta floydwerneri*, new species, *Epicauta brasiliara*, *Epicauta crucei* 2496
temperature effects on survival, *Palaemon latreieri* 9055
toxicity, insecticides, *Spodoptera littoralis* 6615
- Aedeagus**, functional morphology, *Stegobium paniceum* 5808
glands, anatomy, histology, secretion, males, *Tenebrio molitor* 4181
- Aedeagus**, (continued)
morphology, *Apion assimile*, *Apion angusticollis*, Bulgaria 4710
morphology, taxonomy, *Helicobia* 4940
- Aedes**, abundance, distribution, seasonal variations, Nigeria 2150
Bacillus thuringiensis, pathogenicity 6602
biological control, field trials, pasture, *Bacillus thuringiensis israelensis*, USA, Montana 6149
breeding sites, surveys, septic tanks, Malaysia 9261
evolutionary genetics 9440
experimental infection, Ganjam virus 7385
host preferences, disease transmission vectors, USA, Iowa 1198
larvae, biological control, predators, *Gambusia affinis* 617
larvae, production, ecological distribution, Canada, Quebec, La Grande R. 567
pesticides (organochlorine), pesticides (organophosphorus), pesticide resistance, Singapore 5766
population density, seasonal variations, ponds, wastewater treatment, USA, Florida, Indian River Co. 6045
population dynamics, reservoirs, USSR, Armenia, Sayany Reservoir 9374
repellents, electronic equipment, efficacy 8424
species composition, population dynamics, water chemistry 9376
susceptibility, pathogens, *Brugia malayi*, *Brugia pahangi* 2647
sympatric populations, ecological distribution, population genetics, Kenya 2688
- Aedes aegypti**, bioassays, pathogens, *Bacillus thuringiensis israelensis* 5732
biological control, infection, larvae, diets, *Brugia pahangi* 1358
biological control, pathogens, feeding behavior, effects on mortality 1382
biological control, predators, *Toxorhynchites rutilus rutilus* 4579
biological control, toxicity, *Bacillus thuringiensis*, *Bacillus cereus* 4186
blood meals, feeding behavior, *Rodentia* 5160
blood meals, fluids excretion 2798
blood meals, vectors, disease transmission, Venezuelan equine encephalitis virus 4504
chemical control, insecticides 2919
chemical control, pesticides, toxicity 1832
chemical control, polycyclics, toxicity, *Asteraceae* 317
chemoreceptors, sensilla, innervation, role, feeding behavior 3290
chemosterilization effects on mating behavior 9046
control programs, juvenile hormones, methoprene, effects on emergence 1360
dendronucleosis virus storage, effects on infectivity, larvae 8992
diflubenzuron metabolism, toxicity, effects on chemical composition 302
digestive tract cells, morphometry, factors affecting ribosomes distribution 923
disease transmission, yellow fever virus, epidemiology, rain forests, Ivory Coast 9230
food organisms, food preferences, *Toxorhynchites theobaldi* 494
gene mapping, linkage, esterase 1490
geographical variations, susceptibility, endotoxins, *Bacillus thuringiensis*, India 8993
growth regulators, effects on development, toxicity 9054
hormones, ecdysterone, effects on vitellogenesis, oogenesis 5088
hormones, 20-hydroxyecdysone, effects on host searching behavior, oviposition 5875
host searching behavior inhibition, vitellogenesis effects on 2807
host-parasite interactions, growth, diets, *Brugia pahangi* 289
host-parasite interactions, susceptibility, diets, *Brugia pahangi* 288
infection, Venezuelan equine encephalitis virus, immunization, sensitivity, mice 7626
inoculation methodology, microfilariae, *Setaria labiatapillosa* 7259
juvenile hormones regulation, ovary effects on 2583
larvae, biological control, predation, *Mesocyclops leuckarti pilosa* 4503
larvae infection, midgut pH, mortality, *Bacillus thuringiensis* 3423
larvae, intraspecific relationships, competition, food, growth regulators 3618
meiotic drive, polymorphism, genetic factors, models 772
metamorphosis, mortality, *Trachyspermum ammi* oils effects on 6623
new records, infection, *Simulium* parasites, *Gastromermis* 4209
oogenesis, neuroendocrine system 5832
ovary development, juvenile hormones, brain hormones 3488
oviposition, attractancy, amino acids 8966
oviposition deterrents, plant extracts, *Lemna minor* 5311
oviposition, diurnal variations 3525
oviposition, repellents, fatty acids 5859
oviposition, substrate preferences, Thailand 5846
parasites, infectivity, development, *Gastromermis* 5740
pathogens infection, effects on development, *Brugia culisetae* 2645
pathogens, transmission (vertical), infection effects on fecundity, *Microsporidia* 8129
pathology, 8-endotoxin, *Bacillus thuringiensis* 2637
pest control, biological control, efficacy, pathogens 5735
pest control, cattle, toxicants 2176
pest control, pathogenicity, environmental effects, *Bacillus thuringiensis* 8996
pest control, pathogens, *Microsporida* 8127
pesticide resistance, population genetics, DDT, bioaccumulation 1015
pollution effects, PCB, bioaccumulation, aquatic ecosystems 7811
polycyclics toxicity, photosensitization effects on 295
population density, predation effects on, *Toxorhynchites brevipalpis* 7568
population studies, geographical distribution, USA, Arkansas 640
protein biosynthesis, vitellins, vitellogenins 7313
proteases, zygotes, inactivation, *Plasmodium gallinaceum* 8126
pupae mass, effects on adults fecundity, survival 5895
salivary gland ducts, fluids transport 7362
sensilla, anatomy, morphology, reviews 8921
surveys, population density, USA, Louisiana, New Orleans 3679
susceptibility, pathogens, genetics, *Drosophila*, *Brugia* 2623
temperature, effects on allozymes, loci, variation 6238
toxicity, hydrogen peroxide, larvae, pest control 303
traps, adhesives, efficacy 50
tyrosine metabolism, measuring techniques, labelling food organisms 170
vectors, disease transmission, Ross River virus 3695
vitellogenesis, feedback inhibition, ovary 327
vitellogenesis, 20-hydroxyecdysone effects on 3491
- Aedes africanus**, disease transmission, yellow fever virus, epidemiology, rain forests, Ivory Coast 9230
females, population studies, dispersal, gonotrophic cycles, survival, population density, Uganda 1295
life history, disease transmission, vectors 3687

- Aedes africanus**, (continued)
population dynamics, mortality, Uganda 8369.
- Aedes albopictus**,
cell culture, cell lines, methodology 2514.
cell culture, dengue virus, diagnosis, dengue, man 9224
cell culture, infection, baculovirus 2650.
cell culture, isolation, dengue virus 9225.
cell culture, *Oryctes baculovirus* replication 880
cell-free system, protein biosynthesis, mRNA, Sindbis virus 3057
cells, isolation, Japanese encephalitis virus, Getah virus 1348
chromosomes isolation, methodology 3082
dengue virus antigens, detection, immunosays 8166
geographical variations, susceptibility, endotoxins, *Bacillus thuringiensis*, India 8993.
hosts, vectors, Breinlia sergenti, China, People's Rep., Yunnan Province 5288.
infection, protein biosynthesis, Sindbis virus 8123.
mutants, linkage, chromosomes 769.
mutants, sex linkage, recessive, maroon-eye 6270
oviposition, eggs, hatching, setae, morphology 5855
seasonal variations, population density, occurrence, developmental stages, Japan, Okinawa 5897
susceptibility, viruses, Japanese encephalitis virus, Chikungunya virus 8986
vectors, dengue, man 9226.
vectors, disease transmission, dengue virus, Malaysia 4502.
- Aedes albopictus**,
infection susceptibility, inheritance, parasites, *Brugia pahangi*, *Wuchereria bancrofti* 8146.
- Aedes aegypti**,
life cycle, population dynamics, mating, Japan, Yuyama Is. 7574.
- Aedes atropalpus**,
larvae, growth, respiratory organs, head capsules 345.
vitellinogenesis, feedback inhibition, ovary 327.
- Aedes australis**,
larvae, pathogens, *Tolypocladium cylindrosporum* 4211.
- Aedes caecus**,
ecological distribution, population genetics, Kenya 2868.
- Aedes canadensis**,
habitat selection, spatial distribution, bogs, sub-polar environments, Canada, Quebec 6043.
- Aedes cantans**,
abundance, surveys, Yugoslavia 3939.
pathogens, Coelomomyces, iridescent virus, Sweden 8139.
- Aedes cataphylla**,
life cycle, reproduction, blood meals, dispersion 6712.
- Aedes cinereus**,
pathogens, new records, Coelomomyces, Sweden 8139.
- Aedes communis**,
snowshoe hare virus isolation, Canada 1017.
- Aedes cooki**,
susceptibility, pathogens, *Brugia malayi*, *Brugia pahangi* 2647.
- Aedes deditus**,
habitat selection, spatial distribution, bogs, sub-polar environments, Canada, Quebec 6043.
- Aedes dorsalis**,
body size, reproductive status, temperature, salinity effects on 8223.
ecological distribution, saline environments, effects on magnesium sulfate tolerance 8101.
transmission (transovarial), California encephalitis virus, temperature effects on 9236.
- Aedes durbanensis**,
species richness, abundance, breeding sites, females, South Africa, Orange Free State 5282.
- Aedes excrucians**,
habitat selection, spatial distribution, bogs, sub-polar environments, Canada, Quebec 6043.
- Aedes fluviatilis**,
chemical control, insecticides, decamethrin 5350.
- Aedes fulgens**,
disease transmission, Chikungunya virus 1380.
- Aedes furcifer**,
disease transmission, Chikungunya virus 1380
geographical distribution, vectors, yellow fever, Gambia 3658.
- Aedes hebrideus**,
infection susceptibility, inheritance, parasites, *Brugia pahangi*, *Wuchereria bancrofti* 8146.
- Aedes hendersoni**,
larvae, habitat preferences, ecological distribution, USA, Ohio 1951.
- Aedes hexodontus**,
habitat selection, spatial distribution, bogs, sub-polar environments, Canada, Quebec 6043.
- Aedes japonicus**,
life cycle, population dynamics, mating, Japan, Yuyama Is. 7574.
- Aedes juppi**,
species richness, abundance, breeding sites, females, South Africa, Orange Free State 5282.
- Aedes kesseli**,
hybrids, cytoplasm incompatibility, pathogens 5488
new species, taxonomy, morphology, Tonga 6406
susceptibility, pathogens, *Brugia malayi*, *Brugia pahangi* 2647.
- Aedes ledgeri**,
ecological distribution, population genetics, Kenya 2868.
- Aedes malayensis**,
reproductive systems, gonotrophic cycles, oviposition, egg production 1854.
- Aedes melanotomus**,
transmission (transovarial), California encephalitis virus, temperature effects on 9236.
- Aedes micropterus**,
pupae, morphology 8872.
- Aedes notoscutus**,
spermatozoa, locomotion, ultrastructure 105.
- Aedes polynesiensis**,
bioassays, pathogens, *Bacillus thuringiensis israelensis* 5732
eggs, development, strains, cytoplasmic inheritance 1542
hybrids, cytoplasm incompatibility, pathogens, *Aedes kesseli* 5488
larvae, biological control, predation, *Mesocyclops leuckarti pilosa* 4503
parasites, new records, geographical distribution, Vavria culcis.
- Aedes polynesiensis**, (continued)
Ascogegarna, Tokeleu Is. 9196.
pest control, biological control, parasites, population establishment, *Romanomermis culicivora*, Tokeleu Is. 7630.
reproductive systems, gonotrophic cycles, oviposition, egg production 1854.
vectors, disease transmission, Ross River virus 3695.
- Aedes pseudocutellaris**,
bioassays, pathogens, *Bacillus thuringiensis israelensis* 5732
cell lines, β -N-acetylglucosaminidase secretion, enzymatic activity 96.
- Aedes pulchellus**,
taxonomic revision, morphology 6404.
- Aedes punctator**,
habitat selection, spatial distribution, bogs, sub-polar environments, Canada, Quebec 6043.
- Aedes riparius**,
habitat selection, spatial distribution, bogs, sub-polar environments, Canada, Quebec 6043.
- Aedes rusticus**,
abundance, surveys, Yugoslavia 3939.
- Aedes scutellaris**,
activity patterns, periodicity, Brazil 4498.
- Aedes scutellaris**,
hybrids, cytoplasm incompatibility, pathogens 5488
susceptibility, pathogens, *Brugia malayi*, *Brugia pahangi* 2647.
taxonomic revision, identification keys, Tonga 6406.
- Aedes scutellaria**,
infection susceptibility, inheritance, parasites, *Brugia pahangi*, *Wuchereria bancrofti* 8146.
- Aedes serratus**,
activity patterns, periodicity, Brazil 4498.
- Aedes sierrensis**,
vectors, disease transmission, *Canis familiaris*, *Dirofilaria immitis*, USA, California 6073
vectors, disease transmission, *Dirofilaria immitis*, USA, California 4494.
- Aedes sollicitans**,
ecological distribution, population genetics, Kenya 2868.
- Aedes sollicitans**,
abundance, salt marshes, inland water environment, USA, Virginia 8610
infestation, blood meals, mortality, Bos indicus, USA, Texas 3660.
pest control, control programs, environment management, wetlands, USA, Rhode Island, Barrington 5359.
pest outbreaks, environmental effects, USA, Texas, Brazoria Co. 4523.
toxicity, growth regulators, MV678, brackishwater environment 6618.
vectors, equine infectious anemia virus transmission 1329.
- Aedes stimulans**,
biological control, pathogens, temperature effects on susceptibility, *Bacillus* 1817.
pathogens, larvae, *Erynia aquatica*, *Aedes stimulans*, USA, New York 8152
pests, biological control, infection, *Bacillus thuringiensis israelensis*, *Bacillus sphaericus* 3604.
- Aedes taeniorhynchus**,
ecological distribution, saline environments, effects on magnesium sulfate tolerance 8101
oogenesis, neuroendocrine system 5832
pathogens, salinity effects on infection, *Legionella giganteum* 6606
pest control, infectivity, pathogens, *Microsporida* 8127
pest control, insecticides, efficacy, aerosols 8403
pesticide applications, pest control, insecticides 7677
phenothrin, dose-response effects 1401.
toxicity *Bacillus thuringiensis* toxins 5765.
- Aedes taeniorhynchus**,
pest control, surfactants, USA, Florida 674.
- Aedes taylori**,
vectors, yellow fever, geographical distribution, Gambia 3658.
- Aedes togoi**,
mutants, genetic analysis, linkage, morphology 7851
osmoregulation, gastric caecum 5706
oviposition stimulants, larvae 399
sex linkage mutants, genetic analysis, morphology, leg 7852.
- Aedes tongae tabu**,
susceptibility, pathogens, *Brugia malayi*, *Brugia pahangi* 2647.
- Aedes triseriatus**,
diapause, geographical variations, latitude, larvae, USA, East 8222
factors affecting horizontal distribution 4482
food availability, effects on survival, larvae, tree holes 4478
food sources, decomposition leaf litter, tree holes, USA, Indiana 9377.
host plants, chemical composition, effects on population dynamics, larvae 6818.
infection, La Crosse virus, snowshoe hare virus, RNA role 7386
larvae diapause, photoperiods effects on, adaptiveness 348
larvae, habitat preferences, ecological distribution, USA, Ohio 1951.
oviposition attractants, efficacy 1897
seasonal variations, sex ratio, population dynamics, hatching, USA, Indiana 1266.
traps, oviposition, eggs enumeration, substrate specificity, methodology 860.
- Aedes trivittatus**,
host preferences, USA, Iowa 1198
hosts, immune response, parasites, *Dirofilaria immitis* 1031
insecticides, permethrin, malathion, toxicity testing 3438
vectors, infection, *Dirofilaria immitis*, USA, Indiana 9270.
- Aedes vexans**,
abundance, salt marshes, inland water environment, USA, Virginia 8610.
flight activity, abundance, diurnal variations, traps 7617
habitat utilization, irrigation flooding, USA, Florida 1389
host preferences, USA, Iowa 1198
infectious bursitis virus, identification 1828
light, effects on oviposition, visual stimuli, substrate preferences 5077.
vectors, disease transmission, *Dirofilaria immitis*, USA, California 4494.
vectors, infection, *Dirofilaria immitis*, USA, Indiana 9270.
- Aedes vexans niposii**,
occurrence, USSR, Georgia 9461.
- Aedes vigilax**,
biological control, field trials, *Bacillus thuringiensis israelensis*, Fiji 6150.
- Aedina**,
taxonomic revision, morphology, palpus 6407.
- Aegypinaella pullorum**,
pathogens, disease transmission, *Argas persicus*, *Argas africanus* 4501.

- Aegyptobia cremla**, new species, taxonomy, Israel 8724.
- Aegyptobia nomaus**, pests, host plants, new records, Buchloe dactyloides 2066
- Aelia acuminata**, photoperiod, temperature, effects on diapause 7461.
- Aelopus tantalus**, life history, host plants, morphology, larvae 7515.
- Aemetus virescens**, developmental stages, larvae, morphology 4098.
- Aemictus betael**, synonymy, taxonomy, Aemictus decolor 38.
- Aemictus bidentatus**, synonymy, taxonomy, Aemictus decolor 38
- Aemictus decolor**, morphology, geographical distribution, taxonomy 38.
- Aepus marinus**, intertidal environment, ecological distribution, adaptations. British Isles Coast 5230
- Aepus rubini**, intertidal environment, ecological distribution, adaptations. British Isles Coast 5230
- Aerial applications**, decamethrin, control programs, African trypanosomiasis, Glossina, Upper Volta 1345
- insecticides, chemigation, pest control, crop protectobac 4581
- pesticide applications, pest control, Phyllocoptruta demoleus, USA, Florida 3747.
- Aerobes**, gut microflora, mutualism, bacteria, Orthoporus ornatus, Comanchelus 8308.
- Aerodynamic properties**, flight activity, Rhopalocera 8902.
- flight activity, slope soaring behavior, energy expenditure, Pantala flavescens 5137
- flight, locomotion, Calliphora erythrocephala 888.
- locomotor activity, flight control, antennae, Agilus urticae 4956
- locomotor activity, flight control, antennae, Agilus urticae 4957
- wings, flight, Isoegenus, Chrysopa, Myrmeleon, Limnephilus 6522
- wings shape, Schistocerca gregaria 7287.
- Aeroglyphus robustus**, infestation, stored products, environmental conditions, relative humidity, Truncum 8513.
- occurrence, bees, developmental stages, Apis mellifera 2026
- Aerologia**, bacteria, sampling, webs, Araneae 8469
- insecticides, Cyanamid AC-222-705, Montedison M-9270, Montedison M-9580, Montedison M-9751, Anopheles quadrimaculatus, Porophora columbica 6203.
- insecticides, drift, toxicity, Glossina morsitans, Botswana 1469
- insecticides, permethrin, pyrethrin, resmethrin, malathion, chemical control, Anopheles quadrimaculatus, Culex quinquefasciatus 6093
- insecticides, pest control, efficacy, Anopheles quadrimaculatus, Aedes taeniorhynchus 8403
- repellents, efficacy, pest control, Arthropoda 8965
- Aesna imanihili**, new species, taxonomy, morphology, Taiwan 8776
- Aeschia viridis**, rare species, surveys, German Dem. Rep., Greifswald 4721.
- Aeshna bonariensis**, larvae, morphology, Uruguay, Parque R. 865.
- Aeshna moori**, new species, taxonomy, morphology, Zambia 7236
- Aeshna subarctica**, elisabethae, karyotypes, chromosomes morphology, variation, Switzerland 1521
- Aeshna wittels**, morphology, Zaire 7236.
- Aeshna zaira**, population dynamics, crowding effects on, Aphididae 9208.
- Aethalura punctulata**, hosts, parasites host searching behavior, Poecilostictus cothurnatus 2020.
- Aethes diucidana**, new records, geographical distribution, Denmark 5515.
- Aethiophenas**, new genera, taxonomy, morphology, Ethiopia 7932
- Aethomyctus**, new genera, Mascarenes 4864.
- Aethomyctus viridus**, new species, Mascarenes 4864.
- Africanus**, new species, taxonomy, morphology, Scenopinus afghanistanensis 7973.
- new species, taxonomy, Nineta afghanica, Anisochrysa nuristana, Brinckochrysa naumanni 4060
- pest control, malathion, Anopheles pulcherrimus, Anopheles hyrcanus 9241.
- Aflatoxins**, effects on mortality, development, body length, Drosophila melanogaster 5803.
- interspecific relationship, Aspergillus flavus, Penicillium oxalicum, Fusarium moniliforme, Zea mays, Ostrinia nubilalis 6899
- mycotoxins, bioaccumulation, biological control, Aspergillus flavus, Zea mays, Ostrinia nubilalis 4625.
- Africa**, African trypanosomiasis epidemiology, conferences 1334.
- collections, Natural History Museum of Geneva, species composition, Mantispinae, Plataniuspinne 7883.
- control programs, disease transmission, eradication, Glossina 1362.
- disease transmission, trypanosomiasis, socio-economic aspects, Glossinidae 652.
- geographical distribution, population dynamics, control, Culex pipiens 1316.
- geographical distribution, Tetrathemis pollen 7906.
- habitat, ecological distribution, life history, Blifidtermes 5520.
- identification keys, morphology, Aphodinae 2395
- identification, taxonomy, agricultural practices, medical importance, Insecta 3782.
- identification, taxonomy, Insecta 3179.
- identification, taxonomy, status, Insecta 3176.
- identification, taxonomy, status, Insecta 3178.
- keys, morphology, taxonomy, Enicospilus antefurcalis 3219.
- life history, biology, natural enemies, biological control, Phenacoccus manihoti 1194.
- morphology, taxonomy, new species, keys, Chalcidoidea 1649.
- Africa, (continued)**
- new genera, new species, taxonomy, morphology, Tingidae 4856.
- new genera, new species, taxonomy, morphology, 13 species, Spilotrigoidea, Laminiae 7938
- new species, geographical distribution, Dicrodiplosis manihoti 1624.
- new species, new genera, taxonomy, morphology, Krusa, Krusa chrysopelma 6356.
- new species, taxonomy, morphology, Anthridae 7942
- new species, taxonomy, morphology, Athetogona 5567.
- new species, taxonomy, morphology, life cycle, Rhicophilus zambeziensis 2377.
- new taxa, taxonomy, morphology, Batracomorpha 4865.
- parasites, species composition, Coccioidea, host plants, Lygosominae 5206.
- parasitoids, eggs, Clavigralla tomentosicollis 2814.
- pest control, disease control, Trypanosoma, reviews, Glossina 6052.
- pest outbreaks, seasonal variations, environmental factors, Spodoptera exempta 579
- phylogeny, zoogeography, Prosimidiidae 7168.
- plantations, colonization, Coniferales, Glossina pallidipes 1267.
- species composition, association, Ficus, Lissoccephala, Drosophila fima 5964.
- species composition, surveys, historical account, Mutillidae 3949.
- taxonomy, morphology, Crociidae 1665
- taxonomy, morphology, new genera, new species, Notodontidae 4039.
- taxonomy, morphology, new species, keys, Pieroptera 1668.
- taxonomy, morphology, Tingidae 1633.
- taxonomy, revision, Archipsocus ghesquien 848.
- taxonomy, revision, new families, 78 new taxa, Cicadellidae 829.
- vectors, disease transmission, breeding, habitat, Rhicophilus appendiculatus 3683.
- Africa, East**, disease transmission, control programs, man, cultural characteristics, African trypanosomiasis, Glossina 1341.
- Africa, South**, new species, Conocroce parva, morphology, Conocroce walkeri, Conocroce capensis, synonymy, Conocroce bessei 4900.
- occurrence, biogeography, Bothriuridae 9486.
- Africa, Volta R. Basin**, disease control, onchocerciasis, epidemiology, mapping, computers 6068.
- Africa, West**, disease transmission, disease reservoirs, African trypanosomiasis, Glossina 1339.
- disease transmission, mosaic disease, Oodaea mutabilis, Medythia quaterna, Vigna unguiculata 547.
- ecological distribution, disease transmission, African trypanosomiasis, Glossina palpalis, Glossina tachinoides 1343.
- ecological distribution, disease transmission, African trypanosomiasis, Glossina palpalis, Glossina tachinoides 1343.
- resting behavior, habitat preferences, savannahs, Glossina tachinoides 9185.
- African horse sickness virus**, infection, Culicoides puncticollis 3413.
- African trypanosomiasis**, control programs, male sterility, decamethrin, Glossina, Upper Volta 1345.
- disease control, vectors, Glossina, Uganda 4495.
- disease reservoirs, disease transmission, Glossina, Africa, West 1339.
- disease transmission, cattle, Diptera 1338.
- disease transmission, control programs, man, cultural characteristics, Glossina, Africa, East 1341.
- disease transmission, ecological distribution, Glossina palpalis, Glossina tachinoides, Africa, West 1343.
- disease transmission, environmental factors, Glossina, Uganda, Kenya 1347.
- disease transmission, environmental factors, Trypanosoma, Glossina 1337.
- disease transmission, Glossina morsitans 3675.
- disease transmission, population density, ecological distribution, Glossina palpalis palpalis, Ivory Coast 1342.
- epidemiology, Africa, conferences 1334.
- epidemiology, population genetics, Glossina 1336.
- epidemiology, water management effects on, vegetation patterns, geographical distribution, Glossina 1344.
- vectors, capture-recapture studies, flight range, Glossina fuscipes quanzensis, Congo, People's Rep. 4490.
- Afrocinex**, mating behavior, natural selection 1152.
- Afroistoborus**, new genera, morphology 2384.
- Afronurus subflavus**, new species, taxonomy, morphology, Zaire 6413.
- Afrophiocia**, taxonomic revision, Chaetophiloscia balssi 7246.
- Afrophiocia aceti**, new species, taxonomy, morphology, Kenya, Tanzania 7246.
- Afrophylla vethi**, larvae, chromosome number 2322
- Afrotrombicula gabonica**, new species, taxonomy, morphology, Trombiculidae, Gabon 798.
- Afrotrombicula vaubertii**, new species, taxonomy, morphology, Trombiculidae, Gabon 798.
- Agabus**, morphology, larvae, keys 8041
- Agabus apache**, new species, taxonomy, morphology, USA, Arizona 4799.
- Agabus elongatus**, larvae, morphology 4929.
- Agabus wasattjeru**, larvae, morphology 4929
- Agonidae**, pollinators, symbiosis, host plants, Ficus 2848
- Agonidea**, oviposition, population genetics, host plants, Ficus glabrata 2051.
- Agapema**, phylogeny, taxonomy, Saturnia 7864.
- Agapetes galathea**, sexual behavior, environmental effects, ecological distribution 7605.
- Agapostemon**, Dufour's gland, secretion, chemical analysis 988.
- Agapostemon angelicus**, nesting behavior, nests morphology 7006.
- Agapostemon cockerelli**, nesting behavior, nests morphology 7006.

- Agapostemon sericeus**,
nesting behavior, nests morphology 7006.
- Agapostemon splendens**,
nesting behavior, nests morphology 7006.
- Agapostemon texanus**,
nesting behavior, nests morphology 7006.
- Agapostemon virens**,
hosts, larvae, parasites, *Lyta sayi* 6759
nesting behavior, foraging behavior, cleptoparasitism effects on: *Nomada articulata* 1946.
- Agaricus**,
cultivation, spatial distribution, larvae, *Lycoriella agarici*, Australia, New South Wales 2966
- Agathis**,
life history, *Symmetricha capsica* parasites 6720.
new records, parasitism, *Elasmopalpus lignosellus*, USA, Texas 3577
- Agathomyia**,
new records, geographical distribution, Eire 7889
- Agave corollata**,
geographical distribution, marine environment 3966
- Agave hirtellus**,
new species, taxonomy, geographical distribution, marine environment 3966
- Agave verrucosa**,
new species, taxonomy, geographical distribution, marine environment 3966
- Agave**,
capture efficiency, pheromone traps, *Choristoneura* 1679
capture-recapture studies, dispersal, *Anopheles culicifacies*, Sri Lanka 5979
cuticle growth, *Drosophila melanogaster*, *Drosophila pseudoobscura* 8018
dissemination, male selection, courtship, *Pieris protodice* 4297.
effects on chemoreception, odors, *Phormia regina* 7530
effects on chromosomes recombination, males, *Drosophila ananassae* 5463
effects on egg production, oviposition, *Heliothis virescens* 8213.
effects on flight muscle mitochondria morphology, *Musca domestica* 322.
effects on lipid peroxidation, *Musca domestica* 193.
effects on mandibular gland secretions, chemical composition, *Trigona gibboides* 8117
effects on parasites infestation, Ixodidae, Acari, *Trichosurus caninus*, Australia, New South Wales 6776.
effects on protein biosynthesis, rRNA aminoacylation, *Drosophila melanogaster* 4235.
effects on sound production (biological), *Glossina morsitans* 260
females attractiveness, mating behavior, males, *Tenebrio molitor* 7488.
geographic cycles, host searching behavior, blood meals, *Leptocnops carteri* 8291
growth, blood meals, *Amblyomma americanum* 4508
hosts, effects on eggs suitability, parasitoids, *Trichogramma*, *Sepedon fuscipennis* 8320.
hosts, effects on parasitoids development, *Coccylomimus tuniellae* 8330
mating behavior, sexual maturity, *Anopheles stephensi* 9073
mating, effects on ovulation, larvae production, receptivity, *Glossina pallidipes* 7423.
methodology, morphology, apodeme, *Cochliomyia hominivorax* 8017
morphology, antennal sensilla, olfactory perception, *Apis mellifera* 915
oogenesis, blood meals, *Culicidae* 9059.
pigments, physiology, physical activity, *Musca domestica* 321.
population structure, allopatric populations, *Glossina pallidipes*, Kenya 6866
population structure, breeding, Tabandae, Switzerland 4449
queens, effects on mortality, emergence, workers, *Apis mellifera* 8595
trapping, indicators, damage, *Ostrinia nubilalis*, *Capicium annuum* 8514
workers, fatty acids, head, *Apis mellifera* 8090.
- Age composition**,
breeding status, seasonal variations, *Cnaphalocercis medialis*, Japan 7797
diet variations, mathematical models, *Callosobruchus chinensis*, *Callosobruchus maculatus* 8371.
emergence, larvae, *Uroptera carveri* carveri, New Zealand, Wellington 9085
inbreeding, diploidy, *Melipona quadrifasciata* 9032.
population dynamics, predator-prey interactions, mathematical models, *Acaris* 7596
population structure, seasonal variations, *Orchessa cincta* 6001
population structures, reproductive status, Tabandae 9206
temperature effects, population growth, *Glossina* 1307
- Age determination**,
methodology, ovary development, *Culicidae* 8849
- Age distribution**,
population structure, *Aradus cinnamomeus*, Finland, Hanko Peninsula 5217
- Age effects**,
Brachymeria lasus, males sex pheromone response, *Brachymeria lasus* 2754
diapause, growth, *Trogoderma granarium* 1855
eggs size, fecundity, *Schistocerca gregaria* 4276
enzymatic activity, esterase, *Callosobruchus maculatus* 4238
enzymatic activity, flight muscle, *Drosophila melanogaster* 1755
feeding behavior, *Phytoscielus persimilis*, *Amblyseius degenerans* 1206
histones, heterosis, hybrids, *Drosophila melanogaster* 3453
life span, flight activity, energetics, *Apis mellifera* 4241
phenomethy heritability, *Drosophila melanogaster* 2689
parasitism, community composition, *Pinus taeda*, *Rhyacionia frustrana* 1229
reproductive organ secretions, color, *Spodoptera littoralis* 2707
resistance, infestation, *Solanum tuberosum*, *Empoasca fabae* 3597
survival, fecundity, emergence, adults, *Monochamus alternatus* 2905
toxicity, carbaryl, *Leucophaea madense* 1846
- Age composition**,
environmental degradation, recovery, water springs, *Gumaga nigricula*, USA, California 7812
- Agelinaella koppeni**,
new genera, new species, taxonomy, USSR, Abkhazia 6429
- Agelina phoeniceus**,
predation, effects on population levels, pests, *Ostrinia nubilalis*, Canada, Quebec, Beauharnois 5262
- Agelena consociata**,
nest, distribution, density, rain forests, Gabon 5213
- Agelenopsis aperta**,
territorial behavior, food availability, population density 2908
- Ageloides nigricornis**,
prey 2146
prey 2146
- Agrotis**,
juvenile hormones synthesis, inhibition, precocenes effects on 3342.
- Agrotocera sokolovi**,
new species, taxonomy, morphology, Vietnam 6833
- Agglutination**,
immune response (humoral), parasites, *Hymenolepis diminuta*, *Periplaneta americana*, *Schistocerca gregaria* 1010
- Aggregation**,
anti-predator behavior, avoidance behavior, *Halobates robustus* 8603.
colonies, mortality, larvae, *Spilargus imparis*, Japan 2165
distribution, host plants, nymphs, *Hibiscus esculentus* okra, *Ammra biguttula biguttula* 5298
effects on, mortality, development, larvae, *Arge nigridorsata*, *Arge nipponensis* 2696
environmental factors, oviposition, diurnal variations, *Zonocerus variegatus* 3523.
environmental factors, pasture, Acari, Collembola, Brazil, Amazonia 4425.
factors affecting horizontal distribution, *Aedes triseriatus* 4482
feces pheromones, sympatric populations, *Tipula acuta*, *Tipula simplex*, USA, California 6721.
food plants, *Pyronia tithonus* 9093.
larvae, adaptive values, effects on survival, *Pyronia sinica* 1192.
life cycle, *Anguria warzewitzi* host plants, *Paryphes blandus*, Costa Rica 7553.
mud, *Pieris napi*, Finland 9092
night flight activity, convergence zones, atmospheric conditions, *Insecta* 7573
olfactory stimuli, plant extracts, *Avena*, *Oryzaephilus surinamensis* 6700.
overwintering, energetics, *Danaus plexippus*, USA, California 6844.
overwintering, *Polistes exclamans* 5228.
parasites, habitat, larvae, *Dermacentor albipictus*, Canada, Alberta 9181.
phenology, reproduction, *Euploeia core cortina*, Australia 7581.
population density, emergence, *Magdica septendecim* 2154.
population dynamics, *Heteronychia arator*, New Zealand, North Is. 1300
sex pheromone biosynthesis, mating effects on, *Ips paracornutus* 3539
social behavior, phenotaxis, *Gryllus integer*, *Gryllus veletis*, *Teleogryllus oceanicus* 4499
spatial distribution, *Abelmoschus esculentus* host plants, *Ammra biguttula biguttula* 4529
spatial distribution, dispersion, *Thrips tabaci* 4420
spatial distribution, *Myiabus pusillata* 4418
winter survival, *Hippodamia quinquevittata*, Canada, Alberta 3637
workers recruitment, foraging behavior, pheromones, *Myrmica rugulosa* 5169
- Aggregation behavior**,
activity patterns, *Episcapha hymenaea*, Paraguay 7589
aggregation pheromone, *Aponoma hydrosauri*, *Amblyomma limbatum* 1922
aggregation pheromone, *Camponotus pennsylvanicus* 9074
anti-predator behavior, *Schizolochus pineti* 8293
attractants, pest control, *Monochamus alternatus* 1928
colonial characteristics, queens effects on, *Myrmica rubra* 2267
ecological distribution, new species, *Isodes mator*, Zimbabwe 12
interspecific relationships, sexual behavior, *Megarhyssa* 409
larvae, factors affecting, *Arge nigridorsata* 464
males, *Cuterebra leporina*, USA, California 582
mortality, larvae, *Euphydryas phaeton* 7612
nesting behavior, territorial behavior, *Phyllanthus barbatu* 9360
overwintering, clumping, gynes, *Polistes exclamans* 9355
parasitoids, *Aplomyiopsis sylvata*, USA, New York 5143.
pest control, *Metanastria recta*, India, Punjab 7738
sex discrimination, *Megarhyssa* 1481
sexual dimorphism, *Tribolium castaneum* 220
social organization, spatial distribution, males, *Amblycorypha parvipes* 2286
sound production, movements, spatial distribution, males, *Neonoecephalus ensiger* 9161
temperature effects, *Stomoxys calcitrans* 1176
- Aggregation pheromone**,
aggregation behavior, *Aponoma hydrosauri*, *Amblyomma limbatum* 1922.
chemical composition, attractancy, *Tribolium castaneum*, *Tribolium confusum* 2591.
chemical composition, *Rhyzopertha dominica* 1779
effects on larvae, intraspecific relationships, *Blattella germanica* 1161.
glands, histology, *Tribolium castaneum* 8115
inhibition, spectral, verbenone effects on, *Ips typographus* 7336
lineation, allelochemical activity, biochemistry, competition, *Trypoxendron lineatum*, *Gnathorhynchus renatus*, *Gnathorhynchus sulcatus* 1776
mating behavior, males, *Rhyzopertha dominica* 1931
production site location, males, *Tribolium castaneum* 220
sulcatol, pheromone traps, surveys, *Gnathorhynchus sulcatus*, Canada, British Columbia, Vancouver 15387
swarming behavior, *Camponotus pennsylvanicus* 9074
synthesis, *Tribolium castaneum*, *Tribolium confusum* 2594
- Aggression**,
interspecific relationships, feeding behavior, *Trigona*, *Phaethon*
superfluous, Costa Rica 3571
interspecific relationships, castles, colonial characteristics, *Monomorium phaeosum* 3838
swarming behavior, pheromones, workers, *Atta*, *Acromyrmex* 4651
- Aggressive behavior**,
assessment strategy, environmental factors, reproductive behavior, resource allocation, *Scathophaga stercoraria* 1143
attack, *Formica lugubris*, *Formica cunicularia* 3849
colonial characteristics, apiculture, *Apis mellifera* 3731
colonial characteristics, life cycle, *Euphorbia bistrata* 473
coloration, mimicry, *Sattus psicular* 5150
Coreidae, 11 species, Costa Rica, Guanacaste Province 2801
courtship, dominance, males, *Epicauta pennsylvanica* 4296
habitat, abundance, *Parcoblatta* 6845
interspecific relationships, intraspecific relationships, colonies, *Formica lugubris*, *Formica cunicularia* 5159
mate selection, sexual selection, body size, *Brennus anchorage* 6658.
mating behavior, sound production (biological), *Orchelimum gladiator*, *Disostertia carmina* 1151.
morphology, sternal horn, *Doryphora punctatissima* 1982
pollution effects, exhausts, *Apis mellifera* 1940
predator-prey interactions, *Phrynosoma platyrhinos*, *Pogonomymex rugosus*, USA, Nevada 2145
social hierarchy, dominance, *Teleogryllus oceanicus* 4652
territorial behavior, *Cordulegaster boltoni*, Germany, Fed. Rep., Fichtelgebirge 8617

Aggressive behavior, (continued)

territorial behavior, scent marking behavior, *Polistes nimpha* 5156.
territorial behavior, *Vanessa atalanta* 6993.

Agling,

cadmium effects on, temperature effects, *Drosophila melanogaster* 1037.
DNA fragmentation, *Drosophila melanogaster* 4239.
effects on ecdium bromide, *Drosophila melanogaster* 353.
effects on metabolism, amino acids, *Bombyx mori* 4236.
effects on wings, morphology, *Zaprionus parvifinger* 6508.
fecundity, *Plodia interpunctella*, *Ephestia cautella* 9062.
pH, *Drosophila melanogaster* 3452.
pigments, fluorescence, lysosomes, *Spodoptera eridania* 4240.

Agling methods,

disease transmission vectors, Diptera 4493.
hosts, estradiol binding, blood meals, *Rodentia*, *Culicidae* 6888.
methodology, population structure, oogenesis, *Culicoides varipennis varipennis* 4081.
ovary, anatomy, histology, developmental stages, *Pediculus humanus* 4242.
parous state, ovary, *Culex nigripalpus* 855.

Agitation,

effects on flight, α -glycerophosphate dehydrogenase activity 8109.

Aglaia urticae,

flight control, antennae, locomotor activity, aerodynamic properties 4956.
flight control, antennae, locomotor activity, aerodynamic properties 4957.

Agonistic behavior,

castes, colonial characteristics, *Lasiosomus zephyrum* 6216.
defense mechanisms, social behavior, *Apicotermitinae* 6219.
display, use, systematics, *Salicidae* 8731.
habitat preferences, nests, *Apis mellifera* 452.
parental behavior, intraspecific relationships, females, *Sphecx ichneumoneus* 9215.

Agonopterix australianae,

geographical distribution, occurrence, British Isles, Wales 6299.

Agonopterix altillecta,

introduced species, biological control, weed control, *Ulex europaeus*, New Zealand 5335.

Agonum dorsale,

predatory behavior, food selection, prey, foraging behavior 8299.

Agonum karacandae,

new species, taxonomy, morphology, Asia 3984.

Agonum nuytense,

new species, taxonomy, morphology, Asia 3984.

Agra,

taxonomy, morphology, geographical distribution 4792.

taxonomy, morphology, phylogeny, distribution 4793.

Agramma delictatum,

new species, taxonomy, Africa 1633.

Agramma nigricornis,

new species, taxonomy, Africa 1633.

Agramma pseudostriatum,

new species, taxonomy, Africa 1633.

Agramma reticulatum,

new species, taxonomy, morphology, Gambia, Senegal 4012.

Agropyronia euryzona,

new records, Papua New Guinea 4748.

Agraulis vanillae,

migrations, weather, synoptic-scale wind systems, USA, Florida 5978.

Agria housei,

ethionine, methionine, metabolism, diets 3319.

Agria sedon rodriguezi,

geographical distribution, new records, Costa Rica 7233.

Agria anydon,

habitat, ecological distribution, environmental conditions, Costa Rica 7598.

new subspecies, taxonomy, morphology, Costa Rica 7233.

Agriculter ecosystemae,

abundance, activity patterns, *Labidura riparia* 2163.

biological control, herbivores, population dynamics, *Chrysomelidae* 2211.

ecosystem analysis, pest control, reviews, *Insecta* 6208.

pest control, biological control 3029.

pest control, natural enemies, surveys, *Nezara viridula* 607.

population dynamics, *Epilachna varivestis*, *Popillia japonica*, *Heliothis zea*,
Glycine max 6141.

population levels estimation, sampling methodology, *Stomoxys nigra* 46.

soil fauna, species composition, *Insecta*, *Egyp* 7011.

Agricultural land,

aggregation, environmental factors, *Acari*, *Collembola*, Brazil, Amazonia 4425.

habitat, ecological distribution, *Lepidosaphes beccii*, New Caledonia 4429.

pests, abundance, *Psylliodes chrysoccephala*, British Isles, England 2260.

species composition, *Carabidae*, Belgium 9324.

Agricultural lands,

pests, geographical distribution, *Agrotis ipsilon*, India 5367.

Agricultural practices,

apiculture, methodology, *Apis mellifera* 6177.

biological control, pest outbreaks, parasites, *Neoplectana carpocapsae*.

Phonoxystus robiniae 733.

control programs, pests, pesticide resistance, biological control, chemical
control, *Diatraea saccharalis* 1430.

crop fields damage, *Zea mays*, *Busseola fusca*, *Sesamia calamistis* 3748.

crop fields, effects on movements, *Insecta* 6198.

crop fields, effects on pests abundance, *Insecta* 3035.

cross-pollination control, crop yield, *Apis mellifera* 1280.

effects on abundance, species richness, *Carabidae* 8463.

effects on larvae survival, pest control, *Agrotis ipsilon* 611.

effects on pests abundance, *Tryboryza nivella*, *Sesamia inferens*, *Saccharum*
officinale 6951.

effects on pests infestation, *Earias insulana*, *Pectinophora gossypiella*.

Gossypium 6972.

effects on pests population density, *Oryza sativa* crop fields, *Orseolia oryzae*.

Scirpophaga incertula 6947.

grazing defoliation, biological control, *Inopus rubricaps*, Australia 729.

medical importance, identification, taxonomy, *Insecta*, Africa 3782.

orchards pollution, nest building, *Osmia lignaria propinqua* 6935.

paddy fields, effects on abundance, breeding, *Culicidae*, USA, Louisiana 2920.

pest control, barriers, *Aphididae*, *Solanum tuberosum* 684.

pest control, biological control, parasites, *Diatraea saccharalis*, Barbados 2951.

pest control, crop fields, and zones, *Insecta*, India 5401.

Agricultural practices, (continued)

pest control, environment management, *Insecta*, USA, California 3725.

pest control, yield, *Zea mays*, *Vigna unguiculata*, *Insecta* 8520.

pest outbreaks biological control, parasites, *Leptomastix dactylopi*, *Phanococcus*
citri 675.

pollination, *Apis mellifera*, *Medicago sativa*, USA, California 2941.

pollination, effects on yield, *Apis mellifera*, *Helianthus annuus* 3730.

pollination, hybrids, *Gossypium*, *Apis mellifera* 6182.

pollination, orchards, *Osmia lignaria propinqua* 5343.

pollination, orchards, *Osmia lignaria propinqua* 6933.

research programs, environment management, pest control, *Insecta* 3809.

Agriculture,

pests, surveys, *Insecta*, Denmark 5308.

Agrilus bilineatus,

hosts, parasitoids, life cycle, *Phaenoglyphula sulcata*, USA, Wisconsin 2016.

pests, borers, life history, USA, Wisconsin 4333.

Agrilus browni,

taxonomic revision, synonymy, *Agrilus sayi* 2397.

Agrilus sayi,

taxonomic revision, synonymy, *Agrilus browni* 2397.

Agroecemia pygmaea,

digestive tract, parasites, *Holporthynchus ramidigisi*, India 1000.

Agrochemicals,

DIMBOA, effects on growth, *Ostrinia nubilalis* 6100.

growth regulators, EL-494, metabolism, *Lymantria dispar*, *Glycine max* 4999.

Agromyza frontella,

effects on host plants chemical composition, *Medicago sativa* 9296.

life history, emergence, developmental stages, Canada, Ontario 2782.

life tables, pupae, survival, oviposition, USA, New York 450.

pests, infestation, effects on yield, *Medicago sativa*, USA, Vermont 8563.

population studies, abundance, adults, sampling 3238.

predators, effects on host plants chemical composition, *Medicago sativa* 552.

sex ratio, seasonal variations, abundance, grasses, leaf blotch, USA,
Pennsylvania 605.

Agromyzidae,

association, galls, *Rudbeckia laciniata*, *Aspidomyia helianthiglobulus* 6020.

geographical distribution, new records, Iraq 5522.

infestation, crop fields, *Medicago sativa*, Europe 8586.

new species, new records, host plants, Cuba 8784.

species diversity, host plants abundance effects on, *Umbelliferae* 6789.

Agropyron repens,

host plants, weed control, *Notaris bimaculatus* feeding effects on 1250.

Agrotis ipsilon,

abundance, seasonal variations, trapping methodology, Zimbabwe 9179.

chemical control, pest control, crop fields, yield, India 7723.

chemical control, pest control, crop fields, *Zea mays* 3818.

feeding deterrents, exotoxins, *Bacillus thuringiensis* 5779.

host plants, pest resistance, developmental stages, *Zea mays* 6914.

hosts, survival, parasitism effects on, *Bonnetia compta* 6753.

larvae survival, agricultural practices effects on, pest control 611.

life cycle, immigration, diapause, USA, Iowa 5900.

overwintering survival, USA, Missouri 9202.

pathogenicity, toxicity, nuclear polyhedrosis virus 3402.

pest control, chemical control, India 5375.

pest control, nuclear polyhedrosis virus, *Zea mays* 8454.

pest control, pheromone traps 6938.

pest control, pheromone traps, research programs, USA 8574.

pests, geographical distribution, agricultural lands, India 5367.

pheromone traps, catching methods, sex pheromone 2244.

rearing, methodology 3244.

sampling, traps, larvae 8028.

toxicity, exotoxins, *Bacillus thuringiensis* 5051.

Agrotis munda,

migrations, flight activity, radar, Australia, Bass Strait 1264.

Agrotis obesa,

phenology, life cycle, USSR, Azerbaijan 9109.

Agrotis orthogonia,

chemical control, insecticides, efficacy 6088.

chemical control, insecticides efficacy, field trials 9312.

Agrotis segetum,

abundance, seasonal variations, trapping methodology, Zimbabwe 9179.

attractants, sex pheromone, pheromone traps, Japan 2227.

climate, effects on pest outbreaks, mathematical models, Denmark 5412.

neurons, ear, anatomy 5662.

sex pheromone, synthetic attractants isomers, attractancy 3356.

ultrastructure, function, antennal sensilla 143.

Agrotis vestigiaria,

phenology, life cycle, USSR, Azerbaijan 9109.

Agropyron desertorum,

harvesting, pest control, effects on population levels, *Labops hesperius* 8512.

Agrypnia vestita,

enzymatic activity, digestive tract, diets 1757.

Agulla,

food preferences 1197.

Agyrtier bicolor,

synonymy, *Agyrtier nobeli* 6359.

Agyrtier nobeli,

synonymy, *Agyrtier bicolor* 6359.

Ahasverus advena,

stored products pests detection, traps 3783.

Air,

atmospheric conditions, effect on phosphine toxicity, *Insecta* 1050.

Air flow,

pest control, stored products, *Glycyphagus destructor*, *Acarus siro*, *Tyrophagus*
putrescentiae, *Oryzaephilus surinamensis*, *Tribolium castaneum*, *Sitophilus*
granarius 6092.

Air pollution,

effects on growth, development, survival, *Epilachna varivestis* 2153.

effects on pests susceptibility, *Phascolus vulgaris*, *Epilachna varivestis* 6782.

pollution effects, population studies, reviews, *Insecta* 6689.

pollution monitoring, pollution indicators, *Humerobates rostrumellatus*, Belgium
5984.

sulfur dioxide, pollution effects, sexual reproduction, *Bracon hebetor* 7441.

Airborne,

dispersal, coastal environment, *Tetragnatha*, Japan, East China Sea 2101.

Subject Index

- Aircraft**, disease transmission, malaria, imported diseases, *Anopheles*, Europe 4487
- Aix sponsa**, eggs, predation, *Solenopsis invicta* 6858
- Ajuga remota**, host plants, molting inhibitors, Lepidoptera 4274
- Alabane virus**, infection, *Culicoides puncticollis* 3413
- Alkimerus achaefferi**, life cycle, biogeography 9103
- Alabama argillacea**, pest control, biological control, *Bacillus thuringiensis*, nuclear polyhedrosis virus 5409
- Alabidocarpus intercalatus**, morphology, Chiroptera parasites, Belgium 5652
- Alabidocarpus minor**, morphology, Chiroptera parasites, Belgium 5652
- Alabidocarpus nyctali**, morphology, Chiroptera parasites, Belgium 5652
- Alaone aminotransferase**, isolation, characterization, larvae development, *Drosophila nigromelana* 2728
- Alarm behavior**, alarm pheromone, activity, monoterpene, *Tyrophagus putrescentiae* 7339, alarm pheromone, chemical composition, (Z)-2-alkenyl formate, *Tyrophagus putrescentiae* 7342, defensive behavior, attack, *Polybia occidentalis* 2795, foraging behavior, workers, colonial characteristics, *Microtermes michaelseni* 2266, social behavior, communication, nests, *Synoea surinama* 4305
- Alarm pheromone**, activity, monoterpene, alarm behavior, *Tyrophagus putrescentiae* 7339, alarm behavior, defensive behavior, attack, *Polybia occidentalis* 2795, avoidance behavior, host plants, pest control, Aphididae 7337, chemical communication, role, sternal gland, *Aneuretus simoni* 2758, chemical composition, (Z)-2-alkenyl formate, alarm behavior, *Tyrophagus putrescentiae* 7342, colonial characteristics, foraging behavior, colonial characteristics, *Formica rhyssota* 3841, effects on host searching behavior, landing behavior, *Myzus persicae* 7343, response, environmental effects, *Apis mellifera* 417, synthesis, activity, *Tyrophagus putrescentiae* 8974
- Alaskanlunum crinellii**, new species, taxonomy, morphology, USA, Alaska 4062
- Alaskozetes antarcticus**, cold hardness, acclimation, starvation, Antarctica, Signy I. 6579, cold tolerance, survival, thermoregulation, poikilotherms 976, temperature tolerance, seasonal variations, Antarctica 1189
- Alathetus**, brachypterism, morphology 8799, taxonomy, morphology 4853
- Alatipes ballianus**, new species, taxonomy, morphology, Haiti 4853, new species, taxonomy, morphology, Haiti 8799
- Albanoglossus maritimus**, new species, Iran 851
- Albardia**, taxonomy, morphology 3226
- Albioleu**, heritability, genetics, *Melanoplus sanguinipes* 6269
- Albizia falcataria**, hosts, new records, *Pteroma plagiophleps*, defoliation, Moluccas 2092
- Aleodoffia alcedinis**, taxonomy, synonymy, nomenclature, *Brueelia superciliosa* 5607
- Aleoste**, new species, morphology, taxonomy, Brazil 3214
- Alcohol**, metabolism, genetic control, alcohol dehydrogenase, *Drosophila* 3909
- Alcohol dehydrogenase**, activity, development, *Drosophila melanogaster* 7481, activity, *Drosophila* 5695, alcohol metabolism, genetic control, *Drosophila* 3909, enzymatic activity, genetic control, *Drosophila melanogaster* 2343, enzymatic activity, population genetics, *Drosophila melanogaster* 1761, enzyme polymorphism, genetic variance, environmental effects, *Drosophila melanogaster* 5492, genes duplication, population genetics, *Drosophila buzzatii* 5491, genetic variance, biochemical characteristics, natural selection, *Drosophila melanogaster* 3910, genotype-environment interactions, genetic variance, *Drosophila melanogaster* 2298, genotypes, multiple mating, sperm displacement, mathematical models, *Drosophila melanogaster* 9431, inhibition, metals, *Drosophila melanogaster* 7316, loci, enzymatic activity, genotypes, *Drosophila melanogaster* 5443, peptide mapping, genetic variance, population genetics, *Drosophila melanogaster* 7874, stability, measuring techniques, *Drosophila* 182, structure, evolution, *Drosophila* 3334, structure, evolution, *Drosophila* 3334, substrate specificity, *Drosophila melanogaster* 7315
- Aldabra Atoll**, mouthparts, penetration, host plants, *Icerya seychellarum* 4395
- Alddehyde oxidase**, activity, *Drosophila* 5695, activity, genetic control, mal gene, *Drosophila melanogaster* 7858, activity, heterozygotes, cin gene, developmental stages, *Drosophila melanogaster* 7857, histochemistry, imaginal discs, enzymatic activity, *Protophysa* 955
- Aldicarb**, disease control, disease transmission, ryegrass mosaic virus, Acan 1467, insecticides, systemics, chemical control, *Bemisia tabaci*, *Empoasca kraemer* 6196, pesticides, effects on predators, biological control, *Phytoseiulus persimilis*, *Tetranychus urticae* 3766
- Aldrichina grahami**, microbodies, heterogeneity, nucleoids 881
- Aldrin**, pest control, *Triticum*, *Microtermes obesi* 5371, pollution effects, uptake, *Culex pipiens* 4219
- Aldrin epoxide**, activity, microsomes, seasonal variations, *Scapteriscus acletus*, *Scapteriscus vicinus* 5694, microsomes, induction, host plants, *Spodoptera frugiperda* 5712
- Alechara spissocornis**, new records, geographical distribution, Sweden 4726
- Alectoris rufa**, parasites, *Gonodes dispar*, Spain, Granada 8051, parasites, morphology, biometrics, *Cuculogaster heterographus* 8050, susceptibility, terbufos, insecticides, *Brassica oleracea botrytis* 717
- Aleochara moesta**, life history, reproduction, parasites, *Musca domestica* 6775
- Aleocharinae**, entomofauna, Sweden 4712
- Aleurocanthus woglumi**, biological control, parasites, dispersal, *Amutis hesperidum*, *Encarsia opulenta*, USA, Florida 4544, distribution, fruit trees, sampling methodology, USA, Florida 1298, hosts, parasitoids emergence, survival, insecticides effects on 2245, hosts, parasitoids oviposition, host searching behavior, *Amutis hesperidum*, *Encarsia opulenta* 2830, pest control, parasites, *Amutis hesperidum*, *Prospaltella opulenta*, USA, Florida 2946, pest outbreaks, biological control, parasites, USA, Florida 1420
- Aleurodipilus americanus**, taxonomy, new genera, new species, morphology, geographical distribution 2456
- Aleurodipilus basicinctus**, taxonomy, morphology 2456
- Aleurodipilus pergandellus**, taxonomy, morphology 2456
- Aleurogryllus ovatus**, antigens analysis 2913
- Aleuropteryx**, taxonomy, revision 1664
- Aleuropteryx jumpei**, geographical distribution, range extension, USA 3944
- Alexia minor**, taxonomy, lectotypes 4805
- Alexia ulkei**, taxonomy, lectotypes 4805
- Aleyrodes asari**, light intensity, wavelength, effects on development, oligopause 7464
- Aleyrodes spiraeoides**, pest outbreaks, damage, crop fields, USA, California 9290
- Aleyrodidae**, flight activity 9116
- Algae**, correlation, benthos, *Chironomus*, community composition, Canada 2295, feeding ecology, food preferences, *Scatella picea* 3869, population density, community composition, interspecific relationships, *Diptera*, USA, California 3858
- Algal blooms**, natural disturbance, effects on distribution, seasonal variations, coastal environment, *Diptera* 8602
- Algarobius prosopis**, temperature effects on respiration, fecundity, development 8224
- Algeria**, mating behavior, circadian rhythms, geographical variations, *Acrolepiopsis assectella* 5107
- Algorithmus**, developmental stages duration, life history, *Insecta* 5628
- Alienates**, new species, keys, males 2433
- Alienates lurveri**, new species, morphology, taxonomy, USA, Arizona 2433
- Alienates milisi**, new species, morphology, taxonomy, Cuba 2433
- Alkaline phosphatase**, enzymatic activity, oogenesis, *Culex pipiens fatigans* 1886
- Alkaloids**, host plants, tolerance, ecological distribution, *Drosophila mettleri*, *Lophocereus schottii* 4389, sequestering, food preferences, *Danaeae*, Solomon I. 8304
- (Z)-9-Alkenol**, inhibition effects on chemical communication, sex pheromone, *Spodoptera litura* 1163
- (Z)-2-Alkenyl formate**, alarm pheromone, chemical composition, alarm behavior, *Tyrophagus putrescentiae* 7342
- Alkyl methylethylhexanoate**, isomers, attractancy, pest control, *Blattella germanica* 3831
- Alkyl phenyl (dichloromethyl) phosphonates**, bioecides, toxicity, *Culex fatigans*, *Drosophila melanogaster* 1053
- Alleles**, carboxylic-ester hydrolase, temperature, reproduction fitness, males, *Drosophila melanogaster* 7474, complementation, *egg* locus, polytene chromosomes, gene mapping, *Drosophila melanogaster* 8635, enzyme polymorphism, chromosomes, loci, *Coelopa frigida* 6255, enzyme polymorphism, esterase, loci, *Drosophila mojavensis* 5477, enzymes, seminal fluid, competition, sexual reproduction, *Drosophila melanogaster* 2731, frequency, *mdh* gene, *e-5* gene, neutral genes, *Drosophila pseudoobscura* 4673, instability, lethality mutation, X chromosome, *Drosophila melanogaster* 3107, lethality, mutation, loci, *mus-105*, *mus-109*, *Drosophila melanogaster* 8644, mutants, loci, excision, DNA repair, *Drosophila melanogaster* 5444, mutation, *Drosophila* 3103, *trithorax* loci, mutation, *Drosophila melanogaster* 8643
- Allergens**, antigens, immunochemistry, physicochemical properties, *Dermatophagoides farinae* 1568, histamine release, man, *Dermatophagoides farinae* 1372

Allergens, (continued)

- house dust, man, Acari 1371.
hypersensitivity (immediate), man, Chladotanytarsus lewisii, Sudan 1370.
medical importance, Pyrolyphidae, Switzerland 672.
urticaria, Dermatophagoides pteronyssinus, Dermatophagoides farinae 3684
- Allergic diseases,**
house dust, therapy, symptoms, man, Dermatophagoides pteronyssinus 7634.
man, Arthropoda 1374.
- Alliaria petiolata,**
food plants, oviposition, larvae survival, Anthocharis cardamines 5954.
- Allitina,**
pest control, Gossypium crop fields, Pectinophora gossypiella, Earias, Helioidis armigera, India 7701
- Allium,**
effects on oviposition stimulation, Hylemya antiqua 1136.
- Allium cepa,**
pollination efficiency, Halictus fannosus 9166
- Allium oleraceum,**
food organisms, feeding, developmental stages, Hydroecia nordstroemi 3255
- Allium porrum,**
host plants, attractants, biochemical analysis, Acrolepiopsis assectella 1240.
- Allium sativum,**
extracts, effects on feeding behavior, metamorphosis, Epilachna varivestis 7534.
extracts, mortality, Syrphus corollae, Chrysopa carnea, Coccinella septempunctata 9025
- Allocaecia frisoni,**
morphology, taxonomy 6457.
- Allocaecia fumosa,**
morphology, taxonomy 6457
- Allocaecia stansardi,**
morphology, habitat 6457.
- Allocaecia vivipara,**
larvae, parasites, Genistelloides hibernus 2624
- Allocaecia wrayi,**
synonymy, Allocaecia zekia 6457
- Allocaecia zekia,**
synonymy, Allocaecia wrayi 6457
- Allochemnesia,**
new genera, taxonomic revision 4886.
- Allodynerus koenigi,**
occurrence, geographical distribution, France, Spain 9458
- Allotropa,**
pest resistance, mice, Polypax serrata 5275.
- Allomyia,**
biochemical analysis, scent gland oils, Oncomelanus fasciatus, Pyrrhocoris apterus 3377.
body size, Culicoides 2506.
body size, wings, males, Anisoptera 3261.
- Allonoes,**
host selection, colonization, reviews, Scolytidae 6684
- Allonarcys,**
synonymy, eggs morphology, Pteronarcys 8036.
- Allonarcys biloba,**
drumming, auditory communication 8269.
- Allonarcys proteus,**
drumming, auditory communication 8269
- Allotapric populations,**
energy metabolism, fat reserves, feeding, population structure, Glossina pallidipes, Kenya 6866
geographical variations, activity patterns, diurnal variations, Glossina pallidipes, Kenya 7525
- Allotapry,**
phylogeny, Drosophila takahashii, Drosophila pseudotakahashii 5503.
- Allotapropus acutifrons,**
new species, taxonomy, morphology, Seychelles 7245.
- Allotapropus extenuatus,**
new species, taxonomy, morphology, Seychelles 7245
- Allotapropus fjellbergi,**
new species, taxonomy, morphology, Seychelles 7245.
- Allotapropus mabeicus,**
new species, taxonomy, morphology, Seychelles 7245.
- Allotapropus quadridentatus,**
new species, taxonomy, morphology, Seychelles 7245.
- Allotapropus seychellensis,**
new species, taxonomy, morphology, Seychelles 7245
- Allotoposus,**
keys, identification 3988.
- Allozymes,**
alcohol dehydrogenase, enzymatic activity, genotypes, Drosophila melanogaster 5443.
genetic variance correlation linkage disequilibrium, Drosophila subobscura 7866.
genetic variance, population genetics, Xestia 8660
genetic variance, population studies, Pardosa 3927.
heterozygosity, genetic variance, Drosophila 3920.
loci, wings length selection effects on, Drosophila melanogaster 9378.
morphology, analysis, identification, Apis mellifera 53.
polymorphism, genetic variance, geographical variations, Drosophila subobscura 3928.
population genetics, polymorphism, Drosophila, Germany, Fed. Rep. 7061.
reproductive isolation, differentiation, chromosomes, polymorphism, Caleda captiva 3924.
stability, seasonal variations, Drosophila melanogaster 3129.
temperature, loci, variation, Aedes aegypti 6238.
variation, population genetics, Nothomyrmecia macrops, Australia 3123.
- Allozodomyia fuscitarsis,**
new species, taxonomy, morphology, India 4000
- Allozodomyia mugoehi,**
new species, South Africa, Transvaal 8796.
- Allozodomyia variegata,**
new species, taxonomy, morphology, USA, Southeast 7968.
- Allozodomyia fuscipes,**
new records, geographical distribution, India 4000.
- Allygus communis,**
taxonomy, morphology, nomenclature, lectotypes 7980.
- Allygus mixtus,**
taxonomy, morphology, nomenclature 7980.
- Alnus rubra,**
food preferences, feeding behavior, adults, Rhinosinus viridiaceus, Canada, British Columbia, Vancouver I. 2769.
- Alopecia,**
case reports, infestation, Klemanina plumosus, Canis familiaris 7643.
- Alpine environments,**
cold tolerance adaptations, Insecta, Canada 8103.
freezing, cold tolerance, Oribatei, Austria, Alps 3553.
species composition, zoogeography, Rhopalocera, USSR, Tadzhikistan 7071.
- Alsophila pomoteria,**
population genetics, body weight, melanization, genotype-environment interactions 8664
- Alternaria tenuissima,**
infection, damage, Cerotoma trifurcata, Glycine max 9277
- Altica ambiens,**
antifeedants, leaves, oils, Thuja plicata 4352.
- Alticinae,**
new species, new records, geographical distribution, China, People's Rep. 6322.
new species, new records, India 7160.
- Altitude,**
community composition, leaf litter, forests, Uropodidae, Romania 6006.
ecological distribution, Drosophila, Japan, Mt. Soranuma 4463.
ecological distribution, parasitoids, Coleophora alticola. Genotypus melanostoma, Scambus brevicornis, Tetrastichus endemus 4371.
effects on house dust entomofauna, distribution, Pyrolyphidae, Spain 575.
geographical variations, morphology, mouthparts, Orinocarus latreillanus, Italy, Novara 7073.
gradients, community composition, Araneae, Norway 4477.
vertical distribution, pests, crops, Brassica, Insecta, India, Meghalaya 7687.
- Altitudes,**
vertical distribution, enzymes, polymorphism, coloration, Elaphrus americanus, North America, Pacific Northwest 9217.
- Altosid,**
growth regulators, effects on development, sex ratio, Culex pipiens 1042.
juvenile hormones analogues, pest control, toxicity, Culicidae 7739.
- Altusian,**
kin selection, evolutionary genetics, behavioral genetics, Coleoptera 8670.
kin selection, social organization, Insecta 7028.
- Alucita parvella,**
taxonomy, morphology 4052.
- Alum,**
pollution effects, toxicity, Tanytarsus dissimilis 4218.
- Aluminium,**
effects on gene expression, Simulium vittatum 7860.
feeding, Ctenolepisma versluisi 5916.
- Alyscotermes kilimandjaricus,**
agonistic behavior, defense mechanisms, social behavior 6219.
- Alysona conicus,**
nesting behavior, nest provisioning, predatory behavior 5854.
- Amanin,**
analogs, peptide synthesis, inhibition RNA polymerase II, Drosophila melanogaster 3074.
- Amanitin,**
resistance genes, chromosome 3, strains, Drosophila melanogaster 9419.
- α -Amanitin,**
binding, RNA polymerase II, comparison mutants, Drosophila melanogaster 7045.
derivatives effects on RNA polymerase, Drosophila melanogaster 8953.
- Amaphurinus,**
new genera, taxonomy, morphology, Brazil, Amapa 4854.
- Amaphurinus aporema,**
new species, taxonomy, morphology, Brazil, Amapa 4854.
- Amara,**
taxonomy, morphology, France 6498.
- Amara aenea,**
food preferences 4355.
- Amaranthus caudatus,**
host plants, life cycle, Hypolixus nubilosus, Egypt 6730.
- Amarygnus tristis,**
defence secretions, biochemical analysis 3382.
- Amaryllidoideae,**
food plants, antifeedants, Schistocerca gregaria 7348.
- Amathes c-nigrum,**
taxonomic revision, new species, Xestia adela, North America 40.
- Amauromyza belandandae,**
new species, morphology, Japan 2419.
- Amauroematus sagmaricus,**
new records, geographical distribution, British Isles 7886.
- Amber,**
fossils, Entomophthora, Dominican Republic 5539.
- Amblycera,**
parasites, check lists, Mammalia, New Zealand 1231.
- Amblycerus baracoensis,**
synonymy, Amblycerus baracoensis, Nearctic Region 3162.
- Amblycerus baracoensis,**
synonymy, Amblycerus baracoensis, Nearctic Region 3162.
- Amblycerus martorelli,**
synonymy, Amblycerus salli, Nearctic Region 3162.
- Amblycerus salli,**
synonymy, Amblycerus martorelli, Nearctic Region 3162.
- Amblycorypha parvipennis,**
males, social organization, spatial distribution, singing sites, aggregation behavior, population density 2286.
- Amblyomma,**
occurrence, seasonal variations, cattle, Argentina 9265.
parasites, geographical distribution, Reptilia, Australia 3584
- Amblyomma albolimbatum,**
geographical distribution, parapatric populations, Aponomma hydrosauri, Australia, Western Australia 5218.
mating behavior, courtship, reproductive isolation 7494.
parasites, competition, sexual reproduction, Aponomma hydrosauri, Amblyomma limbatum 5939.
- Amblyomma americanum,**
acaricides, efficacy, ivermectin injection, cattle 4506
acaricides, ivermectin, systemics, efficacy 9268
age, growth, blood meals 4508.
feeding, sexual receptivity, mating, oviposition 9068.

- Amblyomma americanum**, (continued)
infestation, guinea-pigs, immune response (humoral) 9260.
infestation, immunity, guinea-pigs 6883
larvae attachment, hosts, blood meals, cattle 8339
larvae, molting, survival, temperature, humidity effects on 1860
larvae, parasites, infestation, man 8431
parasites, host-parasite interactions, immunity, Cavia 1232.
pest control, environmental factors, cattle 8583
pest control, livestock, efficacy 4524.
sampling, catching methods, carbon dioxide, dry ice 3246.
seasonal variations, sex differences, parasitism 3586
storage, temperature effects, fecundity, survival 1129
- Amblyomma hebraeum**,
abundance, surveys, Botswana 3672.
eggs, toxins, biochemical analysis 1070
infestation, resistance, Mammalia 2926
parasites, effects on rabbits, anemia 673
sexual reproduction, interspecific relationships, hybridization, *Amblyomma variegatum* 5486.
transmission, *Theileria mutans*, South Africa 665.
- Amblyomma limbatum**,
aggregation pheromone, aggregation behavior 1922.
mating behavior, courtship, reproductive isolation 7494.
parasites, competition, sexual reproduction, *Aponomma hydrosauri*, *Amblyomma albolimbatum* 5939.
- Amblyomma maculatum**,
vectors, pathogens, *Cowdria ruminantium* 7639
- Amblyomma sparsum**,
larvae, disease transmission, domestic animals, *Cowdria ruminantium* 2175.
- Amblyomma variegatum**,
infestation, resistance, Mammalia 2926.
sexual reproduction, interspecific relationships, hybridization, *Amblyomma hebraeum* 5486.
- Amblyospora californica**,
pathology, infection, *Culex tarsalis* 2629.
- Amblyseius aegyptiacus**,
new species, Nigeria 1588.
- Amblyseius alpicola**,
new species, taxonomy, morphology, Japan, Honshu 7135.
- Amblyseius bibens**,
pesticides, toxicity tests 2664.
predator-prey interactions, biological control, *Tetranychus urticae* 8709.
- Amblyseius citrifolius**,
life history, development, oviposition, longevity, rearing 6719.
- Amblyseius degenerans**,
feeding behavior, nutrient requirements effects on, food sources population density, age effects 1206.
feeding behavior, predation, food sources population density effects on, larvae 1205.
oviposition, development, feeding behavior 1870
predator-prey interactions, population density, predators, effects on food consumption, predatory behavior 4466.
predator-prey interactions, population density, predators, effects on survival, fecundity, dispersal 4468.
predatory behavior, population density, spatial distribution, prey 4350.
predatory behavior, predator-prey interactions, spatial distribution, prey 4356
- Amblyseius delongi**,
life history, population growth, Japan 1184
morphology, taxonomy, Australia 799
- Amblyseius elchari**,
new species, taxonomy, morphology, Asia 8725.
- Amblyseius fallacia**,
dispersal, environmental factors, population density, predator-prey interactions 560.
pesticide resistance, permethrin, selection, biological control 6288
pesticide resistance, population genetics, permethrin, azinphos-methyl 1063
pesticide resistance, selection, azinphos-methyl 3128
pesticide resistance, strains, selection 5794
pesticides, effects on nontarget organisms, predators food consumption, oviposition 5131
pesticides, toxicity tests, effects on nontarget organisms 5046
predatory behavior, prey kairomones effects on, *Tetranychus urticae* 2156
toxicity tests, pesticides, rearing, methodology 7387
- Amblyseius fletcheri**,
new species, morphology, taxonomy, Australia 799
- Amblyseius gossipi**,
food organisms, diets, effects on longevity, fecundity 7603
- Amblyseius hibisci**,
population growth, fecundity, pollen diets effects on 7572
- Amblyseius largoensis**,
morphology, taxonomy, Australia 799
- Amblyseius liturivorus**,
new species, taxonomy, morphology, Japan, Honshu 7135
- Amblyseius longispinosus**,
life history, population growth, Japan 1184
- Amblyseius nambourensis**,
new species, morphology, taxonomy, Australia 799
- Amblyseius parali**,
life history, population growth, Japan 1184
- Amblyseius potentillae**,
pesticides, toxicity tests 2664
predator-prey interactions, biological control, *Tetranychus urticae* 8709
- Amblyseius solus**,
new species, Nigeria 1588
- Amblyseius suudi**,
morphology, Nigeria 1588
- Amblyseius umbraticus**,
taxonomy, morphology, Nearctic Region, Palearctic Region 8723
- Ambositrinae**,
taxonomy, phylogeny, Australia 8819
- Ambrosia dumosa**,
host plants, *Caroliella beeverana*, USA, California 6722
- Ambrysus**,
new species, taxonomy, morphology, 3 species, Mexico 6416
- Ambrysus colimanus**,
new species, taxonomy, morphology, Mexico 6416
- Ambystoma maculatum**,
eggs, predation, larvae, ponds, Chironomidae, Canada, Quebec 1203.
America,
taxonomic revision, species, synonymy, *Phrynos* 2388.
taxonomy, morphology, *Notochaeta bufonivora*, *Emblemasoma erro* 4926.
- America, Eric L.**,
pollution effects, abundance, *Hexagenia* 8619.
- America, Great Lakes**,
parasites, infection, *Tetrahymena*, Chironomidae 3608.
- American foulbrood**,
Bacillus larvae, species, distribution, colonies, *Apis mellifera* 1016.
disease resistance, breeding, apiculture, *Apis mellifera* 3823.
- Ameriopsis**,
new species, taxonomy, morphology, Tahiti, Fiji, Philippines 7139.
- Ameronothridae**,
taxonomy, Australia, Western Australia 2379.
- Amidolus emulsiar**,
life history, ecological distribution, Australia 2874.
- Amidinohydrazones**,
efficacy, pest control, *Solenopsis invicta* 2193.
- Amilenus aurantiacus**,
new records, geographical distribution, Belgium 9483.
- Amines**,
brain, effects on conditioned response, unconditioned response, olfactory stimuli, *Apis mellifera* 6687.
- Amino acid biosynthesis**,
guanine, Dermacentor andersoni, Argas arboreus 8954.
- Amino acid composition**,
antifreeze proteins, larvae, *Tenebrio molitor* 8100
antifreeze proteins, *Tenebrio molitor* 5688.
- Aphididae** 195.
brain peptides, *Calliphora vomitoria* 7290.
hemolymph, diapause pupae, *Heliothis armigera* 2676.
metabolism, developmental stages, *Schistocerca gregaria* 1752.
neurohormone D, heart rate control, *Periplaneta americana* 5698.
plasma proteins, *Bombyx mori* 3913.
vitellin, biochemical characteristics, *Leucophaea maderae* 6552
- Amino acid pools**,
metamorphosis, growth, larvae, *Callosobruchus chinensis* 2712
- Amino acid sequence**,
cocropin B, cocropin D, *Antheraea pernyi* 8952
hemocyanin, *Euryptera californicum* 8925
hormones, Insecta 969
- Amino acids**,
aging effects on, *Bombyx mori* 4236
aromatic compounds, metabolism, cuticles, Insecta 171
artificial diets, composition, rearing, *Anastrepha obliqua* 4922
attractancy, oviposition, *Culex pipiens molestus*, *Aedes aegypti* 8966
chemoreceptors, taste perception, *Periplaneta americana* 5698.
diets, metabolism, *Agria boues* 3319
effects on survival, spermatization, *Apis mellifera* 4277.
gustatory stimuli, discrimination, *Lygus lineolaris* 5163.
hematology, biochemical analysis, *Chironomus thummi thummi* 3306.
hemolymph, larvae, *Diastemma obliqua* 7306
hemolymph, parasitism effects on, *Campoplex chloridea*, *Heliothis armigera* 1022.
metabolism, developmental stages, *Glyptina hercyniae* 7318.
metabolism, m-tyl-N-methylcarbamate, effects on oxidation, phenylalanine, tyrosine, *Bombyx mori* 7317
metamorphosis, growth, larvae, *Callosobruchus chinensis* 5072
nervous system, characterization, *Stomoxys calcitrans* 3283.
nervous system, *Stomoxys calcitrans* 4125
nutrition, growth, hemolymph, larvae, *Bombyx mori* 2709.
- Amino butyric acid**,
hemolymph, effects on neurophysiology, Lepidoptera 4152
- Aminocetophenone**,
mandibular glands secretions, phylogeny, *Mycocarpus goeldii* 2608
- o-Aminobutyric acid transport**,
abdomen ganglia, autoradiography localization 8066
- Aminocarb**,
chemical control, larvae, *Chironomus fumiferanus*, Canada, Quebec 1447.
pesticide applications, pollution effects, activity, forests, *Anthropoda* 9212.
- Aminopeptidase**,
characterization, tissues distribution, *Ceratitis capitata* 933.
chemical properties, specificity, larvae, *Attacus megaloma* 187.
digestive tract enzymes, diets, *Rhodnius prolixus* 1760.
isolation, characterization, mudgut, *Cimex hemipterus*, *Cimex lectularius* 8950.
purification, characterization, *Trinervium trinervis* 931
- Amitus hesperidius**,
parasites, dispersal, biological control, *Aleurocanthus woglumi*, USA, Florida 4544
parasites, pest control, biological control, *Aleurocanthus woglumi*, USA, Florida 2946
parasitoids, emergence, survival, insecticides effects on 2245.
parasitoids, host searching behavior, oviposition, *Aleurocanthus woglumi* 2830.
- Amnatomus icarioides**,
nesting behavior, biology, nest building 1901
- Amnobaenetes lariversi**,
abundance, USA, Nevada 3155
- Amnosia**,
attractancy, lures, Tephritidae, Australia 3741
- Ammophila aberti**,
oviposition, predation evolution, cleptoparasitism 2021.
- Ammophila silvestris**,
new species, taxonomy, morphology, USA, West 6442
- Amnestus basidentatus**,
flight activity, seasonal variations 474
- Amnestus pallidus**,
flight activity, seasonal variations 474.
- Amnestus spinifrons**,
flight activity, seasonal variations 474
- Amoea**,
synonym, *Epispheres* 4057
- Amphibia**,
feces, attractancy, *Scarabaeinae*, Panama 5134.
- Amphimallon majalis**,
milky disease, pathogenesis 7373

- Amphinemura albifasciata**,
new species, morphology, taxonomy, Nepal 3231.
- Amphinemura lebezi**,
new species, morphology, taxonomy, Nepal 3231
- Amphipsylla quadratedigita**,
parasites, geographical distribution, host preferences 783
- Amphipyra berbera svenssoni**,
food plants, food preferences, parasites 4338
- Amphipyra pyramidea**,
food plants, food preferences, parasites 4338
- Amphitornus coloradus**,
pest control, pathogens, baiting 1398
- Amphizoa kashimirensis**,
taxonomy, morphology, phylogeny, geographical distribution 4789
- Amputation**,
antennae, effects on oogenesis, Acanthoscelides obtectus 5824
- Amrasca biguttula**,
biological control, predators food preferences, Marpissa tigrina 1208
- Amrasca biguttula biguttula**,
distribution, host plants, nymphs, Hibiscus esculentus okra 5298
host plants, pest resistance, genetics, Abelmoschus esculentus 6934
insecticides, dusts, efficacy, BHC, carbaryl, endosulfan, DDT, malathion 7749
pest control, insecticides, efficacy 7756
pest control, insecticides efficacy, Abelmoschus esculentus host plants 7683
pest control, insecticides, monocrotophos, toxicity, Pusa falguna 2653
spatial distribution, aggregation, Abelmoschus esculentus host plants 4529
- Amrasca devastans**,
development, host plants, varieties, pests, Gossypium 7791
insecticides, chemical control, pest control, crop fields 4552
pest control, insecticides, crop protection, Gossypium, Thailand 4622
- Amsacta coliaris**,
neurosecretion, cells, cytology, brain 249.
- Amsacta moorei**,
entomopoxvirus, antibodies, enzyme-linked immunosorbent assay, Euxoa auxiliaris 3264
entomopoxvirus infection, pathogenesis 7364
entomopoxvirus, structural protein, isolation, characterization, occlusion body protein 4204
pest control, Azadirachta indica extracts, Vigna aconitifolia 6923.
pest control, chemical control, insecticides 7685
pest control, chemical control, monocrotophos, insecticides, toxicity, mortality 1844.
- Amyelois transittella**,
atmospheric conditions, nitrogen, carbon dioxide, effects on feeding 8278.
infestation on host plants, infestation susceptibility, damage, Prunus amygdalis 2240.
interspecific relationships, attractancy, sex pheromone, Pyralis farinalis 5839.
interspecific relationships, sex pheromone attractancy, Pyralis farinalis 9076.
larvae, viruses, pathology 267.
mating behavior disruption, pest control, (Z, Z)-11, 13-Hexadecadienal 2219.
nuclei, new records, virus-like particles 5739.
oviposition, traps, attractants 6170.
pathogenicity, mortality, chronic stunt virus 5759
pest control, mating behavior disruption, pheromone traps 8507
pest outbreaks, damage, orchards, Pistacia vera 6105.
sexual behavior, diel variations 5838.
- Amylase**,
digestive tract, enzymatic activity, sex differences, Gryllotalpa africana 5247.
enzymatic activity, gene regulation, Drosophila virilis 5480.
- Amylostereum acreolatum**,
symbiosis, Sirex noctilio 3470.
- Amyrsidea**,
ectoparasites, Pedicotes phasianellus, Canada, Manitoba 1230.
- Anabolia furcata**,
sympatric populations, hybrids, morphology, Anabolia nervosa, Europe 7052.
- Anabolia nervosa**,
photoperiodicity effects on diapause 1103.
sympatric populations, hybrids, morphology, Anabolia furcata, Europe 7052.
- Anabrus simplex**,
mating behavior, courtship, females competition 3532.
Antabiotermes albericius, neurosecretion, distribution, brain 123.
- Anacardium occidentale**,
plantations, pest control, rhabdovirus oryctes, Plocaederus ferrugineus 8453.
- Anaciaeschna isoniensis**,
rare species, surveys, German Dem. Rep. J. Greifswald 4721
- Anacridium aegyptium**,
eggs, moisture absorption, survival 6849.
- Anacridium melanorhodon**,
herbivores, nutrients, food plants, phenols 7308.
phenols, diets, cuticle incorporation 7284.
- Anaea andria**,
dimorphism, life cycle, photoperiod effects on 7444.
- Anerobiosis**,
metabolism, larvae, Chaoborus crystallinus 3368.
- Anaesthesia**,
dosage methodology, feeding, Apis mellifera 66.
- Anafenus shinoharaei**,
taxonomy, new species, morphology, geographical distribution, new records, Japan 2447.
- Anagata kucheniella**,
copulation, release factors, physical characteristics 408
stored products pests, development, whey-soy drink mix 9323.
- Anagrus delicatus**,
parasitoids, developmental stages, Prokelisia marginata, USA, Florida, Oyster Bay 4368.
- Anagrus abdul rasouli**,
new species, taxonomy, morphology, Iraq 6434.
- Anagrus fusciventris**,
natural enemies, pest control, Persea plantations, Pseudococcus longispinus 2945.
- Anal glands**,
secretions, molting, Rhapidosireus virgator 6594.
- Analgoidea**,
taxonomy, subfamilies 3967.
- Analogs**,
baits, attractancy, disparlure, Portheria monacha 6930.
- Analogues (continued)**
endrin, toxicity, Diptera 1072.
juvenile hormones, effects on corpora allata, metamorphosis, Pyrrhocoris apterus 2711.
juvenile hormones, effects on development, Insecta 2258
juvenile hormones, effects on fertility, emergence, susceptibility, Sitotroga cerealella 1062.
juvenile hormones, effects on genitalia morphology, Panstrongylus megistus 5089.
juvenile hormones, effects on oocytes ultrastructure, Drosophila melanogaster 1858.
juvenile hormones, structure-activity relationships, Panstrongylus megistus 5000.
molting hormones, ecdysones, biological activity, Culicidae 5003.
- Analysis**,
allozymes, morphology, identification, Apis mellifera 53.
locomotion, films, Arthropoda 852.
- Anaphes ovigentatus**,
parasites, distribution, host plants, Lygus, Nabis, Spissistilus festinus 8384.
- Anaphylaxis**,
immunotherapy, stings, man, Insecta 7635.
- Anaplasma marginale**,
disease transmission, cattle, Hippobosca rufipes, Stomoxys calcitrans 2169.
infectivity, temperature effects on, Demacenter andersoni 8137.
labelling, infection, Demacenter andersoni 6598.
transmission, blood meals, cattle, Arthropoda 7628.
- Anaplasmosis**,
disease transmission, cattle, Hippobosca rufipes, Stomoxys calcitrans 2169.
- Anapius jelskii**,
new species, taxonomy, morphology 8753.
- Anapius wewalkai**,
new species, taxonomy, morphology 8753.
- Anarsia achrasella**,
new species, morphology, taxonomy, India 2465.
- Anarta myrtilis**,
occurrence, Hungary, Balaton Upland 8686
- Anas clypeata**,
mortality, strike, Wohlfahrtia opaca, Canada, Saskatchewan 5190.
- Anas discors**,
mortality, strike, Wohlfahrtia opaca, Canada, Saskatchewan 5190.
- Anas platyrhynchos**,
parasites, morphology, nymphs, adults, Freyana anatina anatina 8030.
- Anastrepha**,
11 new species, taxonomy, morphology, Brazil 8788.
surveys, parasitoids, Costa Rica 2818.
- Anastrepha fraterculus**,
adults, larvae, population dynamics, host-parasite interactions 534.
- Anastrepha ludens**,
mating behavior, courtship, maturation 3529.
pest control traps, efficacy 4628.
- Anastrepha obliqua**,
rearing, artificial diets, amino acids composition 4922.
- Anastrepha parallela**,
morphology, lectotypes 8886.
- Anastrepha reichardti**,
new species, taxonomy, morphology, Venezuela 8790.
- Anastrepha striata**,
morphology, ovipositor 8886.
- Anastrepha suspensa**,
chemical control, fumigation, carbon dioxide, toxicity 1845.
diflubenzuron effects on parasites, Biosteres longicaudatus 357.
fumigants, mortality, chemical control 3444.
hosts, physiology, effects on parasitoids development, Biosteres longicaudatus 9135.
mechanical stimuli, effects on development, flight muscle 8228.
- Anastrepha tecta**,
new species, taxonomy, morphology, Peru 8790.
- Anastrepha zernyi**,
morphology, ovipositor 8886.
- Anateia**,
new genera, taxonomy 5561.
- Anatocata phoenicopteri**,
parasites, morphology, new records, Phoenicopterus ruber, Spain 8336.
- Anatocetus pygaspis**,
parasites, morphology, new records, Phoenicopterus ruber, Spain 8336.
- Anatomy**,
abdomen, wings, coloration, males, Megapodagrionidae, Chlorocyphidae 3362.
accessory gland, duplex, Calpodus ethlius 9040.
aedeagus, glands, males, Tenebrio molitor 4181.
central nervous system, Periplaneta americana 4963.
chemoreception, feeding behavior, electrophysiological recording, Phormia regina 914.
circulatory system, neuroendocrine system, neurosecretions, Bagrada cruciferarum 993
compound eyes, Anomala nufocuprea 7301.
digestive tract, comparison, castes, Rugitermes niger, Brazil 8926.
gastrointestinal tract, air sacs, Veromessor lariversi 4149.
genital tract, function, constrictions, Calpodus ethlius 9038.
genitalia, identification, Xestia dolosa, Xestia adela, Canada, Ontario 2667.
genitalia, males, females, Paradrina 2666.
glands, pheromones, males, Eldana saccharina 5017.
glands, stings, poison apparatus, comparison, Hymenoptera 5014.
histology, reproductive organs, spermatheca, Gesonula punctifrons 328.
hypopygium circumverum, males, Drosophilostylus ornaticauda 9035.
malignant tubules, larvae, Papilio demoleus 8930.
maxillary palps, sensilla, Tioxorhynchites brevipalpis 4137.
mechanoreceptors, Periplaneta americana, femur spine neurons, electron microscopy, 122.
midgut, muscles, Bombyx mori 2550.
muscles, genitalia, males, Tortricinae 8903.
neurons, cerci, Periplaneta americana 5664
neurons, ear, Agrotis segetum 5662.
neurons, thorax sensilla, mutants, Drosophila 4962.
evolution, developmental stages, aging methods, pediculus humanus 4242.
phylogeny, evolution, elytra, Staphylinidae 7288.
a radiation, Dacus cucurbitae 5012.
reproductive organs, females, Goniatinascens 2669.
reproductive organs, Parastizopus armaticeps 9033.

- Anatomy, (continued)**
 reproductive organs, role, sex determination, *Diadromus pulchellus* 3504.
 reproductive systems, development, *Musca domestica* 9036
 reproductive systems, mating behavior, age, *Anopheles stephensi* 9073.
 respiratory system, adaptations, deserts, *Menacras ovals* 8924.
 retina, anterior median eye, functional morphology, photoreceptors, *Plexipus* 4971.
 salivary gland, secretions, *Reduviidae* 252.
 sense organs, appendages, abdomen, *Gryllus domesticus* 803.
 sense organs, horizontal cells, *Phaenicia sericata* 4138
 sensilla, reviews, *Culicidae* 8921.
 sternal gland, functional morphology, *Polistes fuscatus*, *Polistes canadensis* 1801.
 sternal gland, *Mischocyttarus flavitarsis*, *Mischocyttarus drewseni*, *Mischocyttarus mexicanus* 5717.
 ultrastructure, fat body, giant nephrocytes, *Bombyx mori* 3267.
 venom gland, *Braconidae* 8113.
 ventral nerve cord, comparison, families, *Apocrita* 8917.
 ventral nerve cord, *Vespidae* 8916.
Anatrichus erinaceus,
 nests, abundance, seasonal variations, *Sorghum*, *Nigeria* 4560
Anaulaculus golovatchi,
 new species, taxonomy, morphology, USSR 6465.
Anatogeny,
 ovary development, *Chrysops mitis*, USA, New England 1131.
Anax parthenope julian,
 neurophysiology, rhythms, respiratory system 5670.
Ancaudella,
 taxonomy, morphology, geographical distribution 6453.
Anchyrolychnus bicarinatus,
 taxonomy, new species, morphology, geographical distribution, new records, Panama 1614.
Ancistrocerus adiabatus,
 parental behavior, brood care, feeding, life history 1913.
Ancistrocerus antilope,
 sex ratio, habitat, nests 1279.
Anclolomia,
 taxonomy, morphology, geographical distribution, China, People's Rep. 841.
Anclolomia adusta,
 new species, morphology, geographical distribution, China, People's Rep. 841.
Anclolomia tarsalis,
 new species, morphology, geographical distribution, China, People's Rep. 841.
Anclolomia hamatella,
 new species, morphology, geographical distribution, China, People's Rep. 841.
Anclolomia umbosella,
 new species, morphology, geographical distribution, China, People's Rep. 841.
Andralius spinidens,
 predators, life history, Malaysia 4332.
Andrena,
 biochemical analysis, Dufour's gland, secretion, volatiles, cells 244.
 hosts, parasitism, stylization, *Stylops crawfordi*, USA, Texas 6763.
 taxonomy, classification, phenology, Japan 6433.
Andrena accepta,
 venom gland skeleton, morphology 93.
Andrena andrenoides,
 venom gland skeleton, morphology 93.
Andrena erigeniae,
 pollinators, *Claytonia virginica*, USA, North Carolina 2065.
 pollinators, feeding behavior, environmental effects 525.
Andrena erythrogaster,
 venom gland skeleton, morphology 93.
Andrena haemorrhoa,
 phenomones, mandibular glands, biochemical analysis 3351.
Andrena hayesi,
 new records, geographical distribution, USA 5527.
 new records, geographical distribution, USA, Illinois, Henderson Co 9495.
Andrenidae,
 Dufour's gland, chemical composition, defense secretions, volatiles, phylogeny, North America 245.
 venom gland skeleton, morphology 93.
Andricus quercuscalicis,
 geographical distribution, breeding, morphology, British Isles 7616.
Andriniidae,
 taxonomy, classification, computer programs 1586.
Androctonus australis,
 hemocytin, subunit heterogeneity, structure relationship 3320.
 toxins, effects on giant axons, *Periplaneta americana* 5801.
Androlaelaps caprinydus,
 new species, taxonomy, morphology, Cuba 8720.
Andropogonops larva,
 genitalia, morphology, Europe 2428.
Anemla,
 rabbits, parasites effects on, *Amblyomma hebraeum* 673.
Anemotaxis,
 chemical stimuli, flowers, *Hadena bicruris*, *Dielephila ephenor* 5866.
 olfactory discrimination, chemotaxis, orientation, host searching behavior, *Altum* cepa, *Hylemya antiqua* 1239.
Aneristus coreoplatae,
 new records, parasites, hosts, *Coccus hesperidum*, papaya, India 2040.
Anethesia,
 effects on males sexual behavior, *Musca domestica* 430.
Anethum sowa,
 extracts, antifeedants, pest control 746.
Aneploidy,
 X chromosome transcription, genes dosage, *Drosophila melanogaster* 2301.
 colicoid ingestion, *Drosophila melanogaster* 6263.
 patterns, mutagenicity testing, *Drosophila melanogaster* 1526.
 sex chromosomes, sex ratio diversity, *Drosophila melanogaster* 3119.
Aneuratus simoni,
 chemical communication, alarm pheromone, trail pheromone, role, sternal gland 2758.
 chemical communication, sternal gland secretions 2762.
Aneuratus aterrimus,
 new species, taxonomy, morphology, Central America 7978.
Aneuratus brailovskyi,
 new species, taxonomy, morphology, Central America 7978.
Aneuratus elongatus,
 new species, taxonomy, morphology, China, People's Rep. 4008.
Aneuratus hubeianus,
 new species, taxonomy, morphology, China, People's Rep. 4008.
Aneuratus mexicanus,
 new species, morphology, Mexico 31.
Angelica atropurpurea,
 host plants, toxicants, oviposition mistakes, larvae development, *Papilio glaucus* 8247.
Angilia biopiosa,
 new species, taxonomy, morphology 4014.
Angilia orientalis,
 new species, taxonomy, morphology 4014.
Angilia trispinosa,
 new species, taxonomy, morphology 4014.
Angiovelia,
 new genera, taxonomy 4014.
Angiospermae,
 evolution, species diversity, pollination, flowering, *Insecta* 5200.
Angola,
 first record, parasites, *Coelomonys africanus*, *Mermithidae*, *Culicidae* 1271.
 taxonomy, new species, *Archipococcus perplexus* 848.
Angubahia atra,
 new species, taxonomy, morphology, South America 5587.
Asargia varscivici,
 host plants, aggregation, life cycle, *Paryphes blandus*, Costa Rica 7553.
Anlairella ferracialis,
 new species, taxonomy, morphology, Italy 6455.
Anicetus comans,
 parasites, biological control, *Gascardia destructor* 2938.
Anisochrysa carnea,
 mass rearing, development 4250.
Anisochrysa saristana,
 new species, taxonomy, morphology, Afghanistan 4060.
Anisochrysa teiresias,
 new species, taxonomy, morphology, Cape Verde Islands 4059.
Anisodactylus sanctaeracris,
 food preferences 4355.
Anisomyia,
 effects on transcription, RNA biosynthesis, salivary gland, *Chironomus thummi* 5019.
Anisops assimilis,
 hemoglobin physiology, oxygen exchange, buoyancy 1743.
Anisops ayeayi,
 new species, taxonomy, morphology, Australia, Northern Territory 5580.
Anisoptera,
 allometry, body size, wings, males 3261.
 flight activity, temperature effects, body size 3276.
 surveys, German Dem. Rep., Greifswald 4721.
Anisopteromalus calamus,
 evolution, behavior, host selection, parasitoids, predator-prey interactions, *Callosobruchus maculatus* 4367.
Anisopteromalus glaber,
 new species, taxonomy, Germany, Fed Rep 37.
Anisota,
 taxonomic revision 4895.
Anisotropy,
 polytene chromosomes, 2-propanol, *Drosophila nebulosa* 7844.
Anisoter,
 taxonomy, morphology, keys 6366.
Anister histoni,
 new species, taxonomy, morphology 6366.
Annamphorus thimoteorae,
 new genera, new species, taxonomy, morphology, Brazil 8741.
Annaparicatus,
 new subspecies, morphology, taxonomy, zoogeography 807.
Annekecoris,
 new genera, taxonomy 8801.
Annekecoris brunneus,
 Annekecoris, new species, taxonomy, South Africa 8801.
Annual cycles,
 breeding, population dynamics, environmental factors, *Anopheles messeae messeae*, Germany, Fed Rep 3624.
 population dynamics, *Diopsis thoracica*, Senegal 7753.
 population dynamics, *Drosophila*, Japan, Mt Soranuma 4463.
 vertical distribution, seasonal variations, *Labidostomum luteum*, France 7803.
Annual variations,
 abundance, *Noctuidae*, Czechoslovakia 9182.
 abundance, population genetics, *Drosophila pseudoobscura*, USA, California 6279.
 community composition, succession, developmental stages, lakes, *Coleoptera*, Sweden 3857.
 community composition, trophic status, *Syrphidae*, British Isles 3617.
 foraging behavior, environmental factors, *Odontotermes wallonensis*, India 4347.
 occurrence, species composition, *Trichoptera*, *Conusidae*, Finland 8673.
 parasitism, orchards, *Phylloxera crataegella*, USA, Connecticut 5943.
 population dynamics, environmental factors, *Vespula vulgaris*, *Vespula pensylvanica*, Pacific Ocean, Northwest 1268.
 population structure, sex ratio, *Osma lignaria*, USA, Utah 6871.
Anasidae,
 taxonomy, morphology, keys, Mediterranean Region 1604.
Anasium pauciatum,
 pests, buildings, Czechoslovakia, Prague 592.
Anacenter nitens,
 livestock pests, infestation, Barbados 1328.
Anodonta imbecilis,
 parasites, phototaxis, host specificity 5191.
Anoedopora,
 taxonomic revision, morphology, palpus 6407.
Anoetidae,
 morphology, taxonomy, Tunisia 2385.
Anoetoglyptus tunisienais,
 new species, taxonomy, morphology, Tunisia 2385.
Anomala corpulenta,
 pathology, hemolymph, blood cells, infection, *Bacillus popilliae* 2640.
Anomala octiescostata,
 morphology 88.

- Anomala rufocuprea**, compound eyes, anatomy, histology, pigments 7301
- Anomala transvaalensis**, methodology, rearing, life cycle 1962
- Anomalobalcicarus litoralis**, new species, taxonomy, morphology, USA 7147
- Anomaly**, morphology, teratology, Tingidae, Czechoslovakia 3256
- Anomis sabulifera**, nuclear polyhedrosis virus infection, India, Parbhani 7391.
- Anomoeceros punctulatus**, puparia, morphology 5642.
- Anopheles**, biological control, pathogenicity, *Bacillus thuringiensis* 6602, biological control, pathogens, toxins, purification, *Bacillus sphaericus* 8187 bovine leukemia virus, vectors, disease transmission 8432, disease transmission, malana, Europe 4487, disease transmission, malana, Pakistan 2911, infection susceptibility, *Plasmodium falciparum*, China, People's Rep 639 larvae, biological control, predators, *Gambusia affinis* 617, malaria vectors, autecology, population genetics, *Plasmodium* susceptibility 7629, malaria vectors, disease control, research programs 9267, pesticide resistance, malaria vectors, USSR 9438, population genetics, genetic variance, chromosomes 4693, population studies, pesticide resistance, DDT, USSR 9436, strains, susceptibility, insecticides 3441, vectors, disease transmission, bovine leukemia virus 8432.
- Anopheles aconitus**, hybridization, viability, *Anopheles minimus* 4691.
- Anopheles albimanus**, biological control, pathogens, feeding behavior, effects on mortality 1382, disease egg production, sex ratio, stocking rates effects on 387, cycloheximide effects on RNA biosynthesis 6273, malaria vectors, biological control, parasites, *Romanomermis culicivox*, El Salvador 7645, mutants, bald antenna, sex linkage, recessive, chromosomes 5458.
- Anopheles albiparvus**, population genetics, genetic variance, chromosomes 4693.
- Anopheles agassizii**, abundance, rainfall effects on, malaria vectors, French Guiana 3689
- Anopheles arabiensis**, geographical distribution, Niger 628, pest control, formulations, toxicity, *Bacillus thuringiensis* 8121, population dynamics, disease transmission, malaria, Senegal, Pikine 9239.
- Anopheles argenteobasalis**, parasites, first record, *Coomonomermis africanus*, Angola 1271.
- Anopheles atroparvus**, chemosterilization effects on mating behavior 9046, occurrence, disease transmission, France, Lyon 1571, pesticide resistance, DDT, USSR 9439, susceptibility, pathogens, genes, *Plasmodium berghei* 9015.
- Anopheles balabacensis**, infection, parasites, life cycle, *Plasmodium falciparum* 8151, karyotypes, polytene chromosomes, salivary gland 9408.
- Anopheles bascroftii**, disease reservoirs, geographical distribution, Australia, Ord R. 671.
- Anopheles barberi**, larvae, habitat preferences, ecological distribution, USA, Ohio 1951.
- Anopheles culicifacies**, disease transmission, malaria, Pakistan 2911, dispersal, age, seasonal variations, capture-recapture studies, Sri Lanka 5979, dispersal, survival, population dynamics, disease transmission, India 1296, genetic variance, resting behavior, host preferences, blood meals, Sri Lanka 9408.
- Anopheles**, infection susceptibility, *Plasmodium falciparum*, China, People's Rep 639, mating behavior, competition, chemosterilization, males, genetics 1902, mating behavior, population dynamics, capture-recapture studies, Pakistan 7602, oviposition, diurnal variations 3525, pesticide resistance, malathion, genetic factors 1047, pesticide resistance, population studies, India 1311, population levels, seasonal variations, Pakistan, Punjab Province 3650, water temperature, effects on development, survival, immature stages, Pakistan, Punjab Province 6697
- Anopheles cydippe**, parasites, first record, *Coomonomermis africanus*, Angola 1271.
- Anopheles darlingi**, biometrics, sexual reproduction, cycles, fecundity, survival, development, Brazil 7527, malaria transmission, chemical control, DDT, French Guyana 636, population genetics, genetic variance, chromosomes 4693, vectors, malaria, epidemiology, Brazil, Amazonas 5271.
- Anopheles dirus**, blood meals, feeding behavior, malaria vectors 6063, infection, parasites, effects on longevity, *Plasmodium cynomolgi* 5749, infection susceptibility, *Plasmodium falciparum*, China, People's Rep 639, karyotypes, polytene chromosomes, salivary gland 9408.
- Anopheles distinctus**, parasites, first record, *Coomonomermis africanus*, Angola 1271.
- Anopheles erucians**, chemical control, isosteryl alcohol, surface films, *Anopheles quadrimaculatus*, efficacy 6128
- Anopheles farauti**, population genetics, sympatric populations, speciation, Australia 1556, vectors, population levels, disease control, filariasis, Guadalcanal 1357.
- Anopheles freeborni**, infection, *Plasmodium cynomolgi* strains 5027, infection susceptibility, *Plasmodium falciparum*, China, People's Rep 639, postparasites, *Romanomermis culicivox*, control, larvae 2168.
- Anopheles fuesslensis**, isolation, O'nyong-nyong virus, vectors, Kenya 1466.
- Anopheles gambiae**, biological control, genetics, infection, *Plasmodium yoelii nigeriensis* 5338, infection susceptibility, *Plasmodium falciparum*, China, People's Rep 639, insecticides susceptibility selection, DDT, male release 6135, population genetics, genetic variance, chromosomes 4693.
- Anopheles hillii**, bioassays, pathogens infectivity, *Culiciniomyces* 1039, larvae, infection, pathogens, *Smittium morbosum* 1807, parasites, infection, *Smittium morbosum* 1008.
- Anopheles hughii**, new species, morphology, genetic analysis 5566.
- Anopheles hyrcanus**, pest control, malathion, Afghanistan 9241, speciation, population genetics, electrophoresis 1565.
- Anopheles letabensis**, new species, morphology, genetic analysis 5566.
- Anopheles maculatus**, infection susceptibility, *Plasmodium falciparum*, China, People's Rep 639.
- Anopheles maculipennis**, abundance, population density, surveys, Yugoslavia 3635, pesticide resistance, DDT, USSR 9439, population genetics, genetic variance, chromosomes 4693.
- Anopheles maculipennis**, ecology, larvae, morphology, France, Lyon 1571.
- Anopheles marshalli**, taxonomy, morphology, genetic analysis 5566.
- Anopheles merus**, population dynamics, larvae development, salinity effects, Kenya 3616.
- Anopheles messeae**, abundance, population density, geographical distribution, Yugoslavia 3635, disease reservoir, ecological distribution, river basins, Yugoslavia 670, fecundity, females body size effects on 324, new records, geographical distribution, France, Lyon 1571, pesticide resistance, DDT, USSR 9439, X radiation effects on chromosome aberrations 7855.
- Anopheles messeae messeae**, breeding, population dynamics, annual cycles, environmental factors, Germany, Fed Rep 3624.
- Anopheles minimus**, hybridization, viability, *Anopheles aconitus* 4691.
- Anopheles nuneztorari**, population genetics, genetic variance, chromosomes 4693.
- Anopheles pulcherrimus**, pest control, malathion, Afghanistan 9241.
- Anopheles punctipennis**, abundance, salt marshes, inland water environment, USA, Virginia 8610.
- Anopheles quadrimaculatus**, chemical control, aerosols, insecticides, permethrin, pyrethrin, resmethrin 6093, infection, *Plasmodium cynomolgi* strains 5027, insecticides, aerosols, evaluation, wind tunnels 6203, pest control, insecticides, efficacy, aerosols 8403, phenothrin, dose-response effects 1401.
- Anopheles sinensis**, salivary gland, chromosome 3, sex chromosomes, chromosome 2, structure 9410.
- Anopheles squamosus**, parasites, Mermitidae, *Coomonomermis africanus*, Angola 1271.
- Anopheles stephensi**, biological control, pathogens effects on, reproduction, development, *Nosema algerae* 739, chemical control, effects on disease transmission, malaria 663, control programs, juvenile hormones, methoprene, effects on emergence 1360, disease transmission, malaria, Pakistan 2911, dispersal, survival, population dynamics, disease transmission, India 1296, DNA biosynthesis, chromosomes 2305, geographical variations, susceptibility, endotoxins, *Bacillus thuringiensis*, India 8993, infection susceptibility, *Plasmodium falciparum*, China, People's Rep 639, infectivity, pathogens, *Microsporida* 8127, larvae susceptibility, pathogens, disease transmission biological control, 9408, *Metarrhizium anisopliae* 654, mating behavior, sexual maturity, age, anatomy, reproductive systems 9073, mutants, genetic analysis 7850, new records, infection, *Simulium* parasites, *Gastromermis* 4209, oviposition, diurnal variations 3525, parasites, infectivity, development, *Gastromermis* 5740, pesticide resistance inheritance, Malathion 304, pesticide resistance, pesticides (organochlorine), electrophoresis, enzymes, strains 4216, polytene chromosomes, banding 5462, population density, larvae survival, wells 616, population levels, seasonal variations, Pakistan, Punjab Province 3650, sensilla, anatomy, morphology, reviews 8921, toxicity, endrin analogs 1072, toxicity, insecticides, bendiocarb, pirimiphosmethyl 3442, vitellogenesis, role, 20-hydroxyecdysone 3511.
- Anopheles subalpinus**, abundance, population density, geographical distribution, Yugoslavia 3635, infection, France, Lyon 1571.
- Anopheles subtypicus**, dispersal, survival, population dynamics, disease transmission, India 1296, oviposition, diurnal variations 3525, pathogenicity, temperature effects, *Bacillus sphaericus* 2638, population levels, seasonal variations, Pakistan, Punjab Province 3650.
- Anopheles sanduiculus**, pesticides (organochlorine), pesticides (organophosphorus), susceptibility, Singapore 5766.
- Anopheles takasagoensis**, karyotypes, polytene chromosomes, salivary gland 9408.
- Anopheles theileri**, parasites, first record, Mermitidae, Angola 1271.
- Anopheles triannulatus bachmanni**, blood meals, biting, man, Brazil 4354.
- Anopheles typicus**, new records, geographical distribution, France, Lyon 1571.
- Anopheles ziemanni**, visual evoked response, visual stimuli, avoidance behavior, hosts, attractants 1919.
- Anophelinae**, geographical distribution, Niger 628.
- Anoplius tenebrosus**, antennal sensilla, ultrastructure, sex differences 8071.

Subject Index

- Anoplolepis curvipes**,
eggs, parasitoids, Africa 2814.
- Anoplolepis**,
disease control, pigs 642.
parasites, infestation, *Peromyscus maniculatus* 2831
pesticide applications, spraying, livestock, *Sus scrofa* 8429
range extension, Rodentia parasites, Canada, Quebec 4386
- Anorhynchus septentrionalis**,
life history, immature stages, laboratories 1985
- Anotylus insignitus**,
new records, Costa Rica, Honduras 2371.
- Anoxia**,
effects on phosphine toxicity, stored products pests, Insecta 1051.
- Ant hills**,
historical ecology, grasslands, *Lasius flavus* 569
- Antennus boguei**,
taxonomy, new species, morphology, Mexico, Socorro Island 1607
- Antagonism**,
methoprene, prococene, castes differentiation, *Prothiotermes simplex* 6647.
serotonin, histamine, saliva, *Rhodnius prolixus* 3385.
- Antarctic**,
cold tolerance adaptations, Acari, Collembola 8102.
supercooling, cold hardiness, Collembola, Acari, Diptera, Belgica antarctica.
Cryptopygus antarcticus 3364.
- Antarctica**,
cold tolerance adaptations, freezing, Insecta 2730.
population structure, sex ratio, swarming, males, Belgica antarctica 6016.
temperature tolerance, seasonal variations, Alaskozetes antarcticus, Cryptopygus antarcticus, Belgica antarctica 1189.
- Antarctica, Marie Byrd Land**,
new species, taxonomy, morphology, *Nanorchestes wilbanksi* 7148.
- Antarctica, Signy I.**,
cold hardiness, acclimation, survival, Cryptopygus antarcticus, *Parisotoma octoculata* 6583.
cold hardiness, *Nanorchestes antarcticus*, *Alaskozetes antarcticus*, *Stereotydeus villosus*, *Gamaselus racovitzai* 6579.
- Antarctica, Victoria Land**,
new species, abundance, geographical distribution, sympatry, *Nanorchestes antarcticus*, *Nanorchestes bellus*, *Nanorchestes lalae*, *Nanorchestes breckinistae* 4703.
new species, geographical distribution, *Nanorchestidae* 8722.
- Antenna**,
development, larvae, *Tenebrio molitor* 9043.
- Antennae**,
ablation, sex determination, parasitoids, Pimplinae 7471.
amputation, effects on oogenesis, *Acanthoscelides obiectus* 5824.
communication, trophallaxis, information theory, *Myrmica rubra* 5870
flight control, locomotor activity, aerodynamic properties, *Aglais urticae* 4956
flight control, locomotor activity, aerodynamic properties, *Aglais urticae* 4957
morphology, sense organs, brush-organs, *Eusila hypera* 2511.
morphology, taxonomy, *Orthocladus bipunctatus* 6411
morphology, *Trichoplusia* ni 3257.
olfactory perception, lemon oil components, electrophysiological recording, *Periplaneta americana* 7295.
pheromones catabolism, enzymatic activity, olfaction, *Trichoplusia* ni 4168
regeneration, electrical stimulation effects on, *Lithobius forficatus* 1090
role, orienting response, chemotaxis, sex pheromone, *Periplaneta americana* 2760
sense organs, effects on mating behavior, *Blattella germanica* 2744
sense organs, neurons morphology, mutants, *Drosophila* 142
sense organs, ultrastructure, *Polyxenus lagurus* 4140
supernumerary, regeneration, *Blabera craniifer* 7430
tracking, visual perception, *Gryllus campestris* 2534
- Antennal chemoreceptors**,
mating behavior, recognition, males, *Drosophila bipunctata*, *Drosophila melanogaster* 8251
sensilla trichodea, electroantennograms, synthetic sex pheromone, *Spodoptera exempta* 7344
- Antennal hair**,
antennal sensilla, ultrastructure, *Geophilus longicornis* 6528
- Antennal sensilla**,
antennal hair, ultrastructure, *Geophilus longicornis* 6528
chemoreceptors, mechanoreceptors, ultrastructure, *Hypera postica* 3289
chemoreceptors, ultrastructure, *Caliphora vicina* 6529
chemoreceptors, ultrastructure, *Scaptomyza postica* 6532
electrophysiological recording, chemical stimuli, pheromones, *Yponomeuta* 4143
electrophysiological recording, pheromones enantiomers, *Dendroctonus frontalis* 4313.
embryogenesis, *Drosophila melanogaster* 6635
genetic factors, inheritance, *Apis mellifera* 7060
innervation, ultrastructure, larvae, *Simulidae* 4135
morphology, distribution, *Blattella germanica* 905
morphology, distribution, *Hypochlora alba* 8072
morphology, *Scotylus scotylus*, *Scotylus multistriatus* 7297
morphology, systematics, *Braconidae* 2509
morphology, *Trichoplusia* ni 3257
olfactory perception, morphology, age, *Apis mellifera* 915
oviposition, *Tinea pellionella* 3286
Paxylommatidae, taxonomy, *Hybrizotia* 1647
temperature perception receptors, ultrastructure, *Periplaneta americana* 146
temperature receptors, *Speophyes lucidulus* 4979
ultrastructure, electron microscopy, juveniles, *Polydesmus consocius* 75
ultrastructure, function, *Agrotis segetum* 143
ultrastructure, sensilla basiconica, *Geophilus longicornis* 7305
ultrastructure, sex differences, *Anoplius tenebrosus* 8071
- Anthonomus grandis**,
biogenic amines, central nervous system, histochemistry 126
- Anthaxia ariadna**,
new species, taxonomy, morphology, Crete 8760.
- Anthaxia berbera**,
new species, taxonomic revision, morphology 8748
- Anthaxia brockwayi**,
new species, taxonomy, morphology 8760
- Anthaxia passerini**,
taxonomic revision, keys 8748
- Antherea asiamensis**,
karyotypes, meiosis, sex chromosomes 3897
- Antherea compta**,
karyotypes, meiosis, sex chromosomes 3897.
- Antherea pernyi**,
cecropin B, cecropin D, immune system, antibacterial activity 8952.
chorion proteins, genes, evolution 4666.
enzymatic activity, brain adenylate cyclase, diapause 124
flight activity, U.V. radiation effects on 6702
parasites, *Complexonermus*, China, People's Rep., Liaoning Province 6007.
- Antherea polyphemus**,
genes, linkage, DNA structure, evolution 1492
RNA biosynthesis, juvenile hormones, 20-hydroxyecdysone effects on 3885.
- Antherea yamamai**,
mass rearing, environmental conditions, growth 9313
mating behavior, copulation, oviposition, calling behavior, Japan 1910.
summer diapause, photoperiods effects on 3472.
- Antherea polyphemus**,
pupae, new records, predation, *Sciurus carolinensis*, USA, Wisconsin 5265.
- Antherrigona**,
pests, host plants association, Gramineae, India 4557
- Antherrigona varia soccata**,
pests, damage, host plants susceptibility, *Panicum millacium* 7704.
- Anthicidae**,
surveys, West Indies 1612.
Tanzania 3982
- Anthicus tobias**,
surveys, West Indies 1612.
- Anthidium toltecum**,
new records, geographical distribution, USA 7115.
- Anthidiinae**,
taxonomy, morphology, Anthidiinae, Morocco 7210.
- Anthidium berbericum**,
new species taxonomy, morphology, Morocco 7210.
- Anthidium flavorufum**,
new species, taxonomy, morphology, Arabia 5596
- Anthidium maculosum**,
territorial behavior, reproductive behavior 1177
- Anthidium manicatum**,
habitat preferences, nesting, urban environment, walls, British Isles 1182
territorial behavior, reproductive behavior 1177
- Anthidium tergomarginatum**,
new species taxonomy, morphology, Arabia 5596
- Anthochoris cardamines**,
dwarfism, morphology 8881
habitat selection, community structure, speciation, coevolution, host plants, *Cnicifera* 8348.
oviposition, edge effect, host searching behavior 4290
oviposition, food plants, larvae survival, *Alliaria petiolata* 5954
- Anthochoris cethura catalina**,
endangered species, ecological distribution, abundance, USA, California, Catalina I, 2105
- Anthochoris euphroides**,
new records, geographical distribution, Spain 3138
- Anthochoris sara**,
feeding, host plants, flowers, *Streptanthus*, USA, California 8340.
- Anthochoris sera gauderi**,
endangered species, ecological distribution, abundance, USA, California, Catalina I, 2105
- Anthophtes glycomile**,
new species, taxonomy, morphology, India 7138
- Anthopsis nemorum**,
mass rearing methodology, biological control, *Phorodon humuli* 2259
predators, pest control, greenhouse, *Trialeurodes vaporariorum* 7708
- Anthophtes**,
new genera, morphology, taxonomy, Anthomyiidae 816.
- Anthomyiidae**,
geographical distribution, new records, India 7913
larvae, association, fruit bodies, fungi 538
morphology, taxonomy 30
taxonomy, morphology, Australia 5574
taxonomy, morphology, new records, Japan 7177
- Anthonomus grandis**,
pests detection, spatial distribution, traps, mathematical models 2242.
- Anthonomus grandis**,
biological control, pest control, predation, *Solenopsis invicta* 2200.
catching methods, traps, pheromones 702
deterrents, feeding behavior, acids, oils, biochemical analysis, *Aleurites fordii* 223.
diflubenzuron, radiation, effects on sterility 1123
electroantennograms, olfactory stimuli, sex pheromone, attractants 5006
feeding deterrents, pests 2252
genetics, survival, radiation 2296
grandure trapping efficacy, pests 8528
host-parasite interactions, *Mermithidae*, new genus, *Nematoda*, taxonomy, new records, USA, Louisiana 601
mass rearing, eggs, saline water, recycling methodology 8854.
mortality, host plants physical properties effects on, *Gossypium hirsutum* 6115.
pest control, chemosterilization, flight, sterility, spermatozoa transfer 2225.
pest control, sex pheromone, chemical communication disruption 5293.
pest control, sex pheromone, mating behavior disruption 9325.
pest control, sterile-release, selection, survival 3718.
pheromone traps, design 3718
pheromones biosynthesis, localization, fat body 4167.
radiation, chemosterilization, infection, pathogens, *Staphylococcus aureus*, effects on hemolymph 5711
reproduction, competition, sterilization 9053
sterile-release, competition, sexual reproduction, males 8541.
sterilization, pest control, diets, radiation 3486
survival, population growth, temperature effects 3641
temperature effects, paralysis, reproduction, longevity 1105.
traps, sex pheromone, bait, detection 703
winter survival, forest floor litter, USA, Mississippi 614.
- Anthonomus grandis grandis**,
bacteria infection, effects on toxicity, insecticides 8188
chemical control, insecticides, diflubenzuron, efficacy 4584.
diets, nutrient sources, proteins, sucrose, effects on locomotor activity 8276.
enzyme polymorphism, heterozygosity, genotypes, distribution, USA, Arizona 2339

Anthonomus grandis grandis, (continued)

- esterase inheritance 8661
karyotypes, chromosomes 3080.
males, diapause, fertility, competition, sexual reproduction 2677.
males, rearing, cages, effects on oviposition, egg production 4086
mortality, developmental stages, crop fields, Gossypium, USA, Texas 6125
pest control, diflubenzuron efficacy 8519
physiology, reproduction, winter 3558
rearing, oviposition cages, size effects on egg production 8238
toxicity, insecticides, methyl parathion, azinphosmethyl, malathion, permethrin, fenvalerate 9026
traps, efficiency, diets 6194
- Anthonomus grandis thurberiae**,
enzyme polymorphism, heterozygosity, genotypes, distribution, USA, Arizona 2339
- Anthophila fabriciana**,
overwintering, parasites, British Isles, England 5153
- Anthophora bomboides**,
phoresy, genital tract, Hymenoptera, Acrostichus 1213
- Anthophoridae**,
plants functional morphology collection structure, functional morphology 91
- Anthraquinones**,
defense mechanisms, biochemical characteristics, Pyrrhalla luteola 6734
kermesic acid, synthesis, Coccioidea 4154.

Anthrax,

- taxonomy, morphology 7189.
- Anthrax analis**,
habitat preferences, life cycle, population dynamics, parasitoids 8383.
- Anthrax gideon**,
habitat preferences, life cycle, population dynamics, parasitoids 8383.
- Anthrenus flavipes**,
pest control, feeding, clothing, permethrin 3796
proteinase, characterization, isoelectric focusing 5692
- Anthrificidae**,
new species, taxonomy, morphology, Africa, Madagascar, Philippines, Brazil 7942
taxonomy, new taxa, Japan 1608

Anthroos,

- defense mechanisms, biochemical characteristics, Pyrrhalla luteola 6734.

Anti-predator behavior,

- avoidance behavior, aggregation, Halobates robustus 8603
defensive behavior, Myrmecol, Formicidae 6836
food organisms, Collembola, Acarna 498
foraging behavior, interspecific relationships, Latrodectus hesperus, Pagonomyrmex rugosus 6731
foraging behavior, intraspecific relationships, freshwater environments, Notonecta hoffmanni 7819
predator-prey interactions, Syrphidae, Schizolachnus pineti 8293
soil-dropping behavior, Tetranorium caespitum, Halictidae 9119.
- Anti-predatory behavior**,
predator-prey interactions, Orus insidiosus, Serciothrips variabilis 3613.
- Antibacterial activity**,
immune system, cecropin B, cecropin D, Antherea pernyi 8952.
peptides, cecropins, Hyalophora cecropia 7314.
- Antibacterial agents**,
immune, gram-negative bacteria, Galleria mellonella, Hyalophora cecropia 1818.
proteins, chemical composition, Hyalophora cecropia 203.
- Antibiotics**,
host plants, effects on feeding behavior, Heliothis zea, Zea mays 2044
host plants, pest resistance, Gossypium hirsutum, Heliothis virescens 9352.
host plants, pest resistance, Medicago sativa, Theroopsis trifolii 7774
host plants, pest resistance, Sorghum vulgare, Atherigona soccata 7751.
pest resistance, plant breeding, Oryza sativa, Orseolia oryzae 522
resistance, pests, Eremochola ophiuroides, Spodoptera frugiperda 4406

Antibiotics,

- apiculture, residues, honey, larvae, Apis mellifera 2243
chironomid-like effects on hemolymph proteins, nutrient deficiency, Apis mellifera 8110.
effects on sterility, Heliothis subflexa, Heliothis virescens 3501
effects on symbionts, mycetome, diets, Rhizopertha dominica 7535.
effects on yeasts like symbionts, mortality, Nilaparvata lugens 8307
Gossypium extracts, effects on development, Earias vitella 6146.
infection, treatment, cattle, Psoroptes ovis 8425
methylbenzyl, acaricides, Streptococcus hygroscopicus aureolacrimosus, pest control, Tetranthyrus urticae, Panonychus citri 5309
nikkomycin, effects on malpighian tubules, gut, osmoregulation, Epilachna varivestis 5713.
nikkomycin, effects on osmoregulation, ultrastructure, gut, malpighian tubules.
Epilachna varivestis 4175.
streptococcal effects on pheromones, biosynthesis, Ips paraconfusus 3352
toxicity, resistance, milbemycin, Tetranthyrus urticae 1838
treatment, cytoplasm incompatibility, hybrids, Aedes polynesiensis, Aedes kesseli 5488.
tunicamycin, inhibition, biosynthesis, chitin, Triatoma infestans 6587.

Antibodies,

- antigens, immunology, development, Drosophila melanogaster 3502
cell lines, clones, Drosophila melanogaster 2513.
effects on, embryo cells differentiation, lysis, Drosophila 368.
entomopoxvirus, enzyme-linked immunosorbent assay, cell culture, Amsacta moorei.
Euxoa auxilans 3246
immunohistochemistry, vitellogenesis, Locusta migratoria 1133.
NADPH-cytochrome reductase, cross-reactivity, Spodoptera eridania, Insecta 1768
production, tyrosine aminotransferase, Drosophila hydei 932.
proteins, biochemical analysis, Drosophila melanogaster 3270
skin sensitization, pest resistance, infestation, Syngaster floridanus.
Haemaphysalis leporispalustris, Dermacentor variabilis 5276.

Antibody response,

- immunity, man, Ixodidae 3701

Anticarsia gemmatilis, (continued)

- abundance, crop fields, agricultural practices effects on 3035.
abundance, crop fields, weed control effect on, Glycine max 2997
disease transmission, nuclear polyhedrosis virus, Bombyx mori 277
grazing, defoliation, effects on, Glycine max 2003.
host plants pest resistance, cultivars, Vigna unguiculata 8522
host-parasite interactions, Euplectrus putleri, larvae, USA, Florida, Dade County 508.
host-parasite interactions, larvae, Rachiptusa ou, Autographa biloba, USA, Florida 1294.

Anticarsia gemmatilis, (continued)

- host-parasite interactions, Meteorus autographae, Glycine max, USA, South Carolina 507
infection, pathogens, ultrastructure, morphogenesis, Nomuraea rileyi 4208
infection, susceptibility, mortality, pathogens, Nomuraea rileyi 5755.
larvae, development, host plants role 2067.
larvae, grazing, leaves, Glycine max 1257.
larvae, winter survival, population levels, USA, Mississippi 1273.
mortality, infection, nuclear polyhedrosis virus 1826
pathogenesis, infection, developmental stages, Nomuraea rileyi 5747.
pest control, insecticides, pathogens 2236.
pest control, Phaeosolus vulgaris 709.
pest control, predators, crop fields, Glycine max 6148.
pests, cultivars, resistance, Vigna unguiculata 4614.
pests, predator-prey interactions, precipitin test 1690.
population density, sampling methodology, crop fields, larvae 6114.
- Anticarsia gemmatilis**,
sexual behavior, calling behavior 1924.
- Anticarsia gemmatilis**,
oviposition, longevity, hatchability, temperature effects 1934.
- Antidorsax marsupialis**,
parasites, incidence, Arthropoda, South Africa 9146.
- Antifeedants**,
biological properties, feeding behavior, herbivores, Insecta 8294.
chlordimeform, diterpenes, bioassays, larvae, Spodoptera littoralis 2654.
chlordimeform, effects on feeding behavior, Manisra brassicae 5383.
defense secretions, Chauliognathus, Phidippus 2612.
efficiency, pest control, larvae, Diacrisia obliqua 1462.
food plants, Amariilloideae, Schistocerca gregaria 7347.
food plants, Hymenocallis littoralis, Schistocerca gregaria 7531.
fungicides, Spodoptera mauritia 8975.
gallic acid, coumarin, effects on food consumption, food conversion, Spodoptera littoralis 7345.
hardwoods extracts, Reuteliomermes flavipes 3808.
host plants steroids, Epilachna varivestis 2077.
host plants, Warburgia, Spodoptera exempta, Spodoptera littoralis 2842.
leaves, Corchorus capsularis, Myllocerus discolor 5207.
pest control, cypermethrin, permethrin, Pieris brassicae 3032.
pest control, extracts, Anethum sowa 7346
pest control, stored products, repellents, Rhizopertha dominica, Tribolium castaneum 7729.
phenylheptatriene, Euxoa messoria 8970.
plant extracts, Corchorus capsularis, Myllocerus discolor 2851.
plant extracts, neem oil, Azadirachta indica, Schistocerca gregaria 7347.
plant extracts, oils, Thuja plicata, Pissodes strobi 4352.
plant extracts, phenolics, Morus, Bombyx mori 7529.
plant protection, Diabrotica 2976.
plants, chemical composition, Lepinotarsa decemlineata 521.
precocene, analogs, larvae, Rhodnius prolixus 8963.
purification, ipolamide, Stachytarpheta mutabilis 8967.
quassinsin, larvae, Locusta migratoria migratoriosus 2660.
repellents, chemical composition, mimicry, Metriophris hipidius 1785.
- Antifreeze**,
proteins, purification, amino acid composition, Tenebrio molitor 5688.
- Antifreeze proteins**,
purification, amino acid composition, larvae, Tenebrio molitor 8100.
- Antigen-antibody interactions**,
immunoglobulin E, stings, Hymenoptera 3699.
- Antigenic characteristics**,
bones cell surface, comparative studies, Blaberus craniifer 100.
disease transmission, Trypanosoma brucei, Glossina morsitans 3674.
disease transmission, Trypanosoma brucei, Glossina morsitans 3675.
nuclear polyhedrosis virus, toxicity, Manisra brassicae, Europe 2617.
polyene chromosomes, Drosophila 3073.
venom, Apis mellifera 1366.
venom, comparative studies, Vespa maculifrons, Vespa squamosa, Vespa crabro 1365
viruses, isolates, Nudaula cythera capensis 5748
- Antigenic relationship**,
Dermatophagoides farinae, Sarcophaga scabiei 1381.
- Antigenic variants**,
pathogens, continuous culture, trypanosomiasis vectors, Trypanosoma brucei
brucei, Glossina morsitans 8419.
- Antigenicity**,
hemoglobulins, Chironomus thummi 4990.
venom, detoxification, Apis mellifera 5041.
- Antigens**,
allergens, immunochemistry, physicochemical properties, Dermatophagoides farinae 1368
analysis, Acari 2913.
antibodies, immunology, development, Drosophila melanogaster 3502.
dengue virus, association Aedes albopictus, detection, immunoassays 8166.
Dermatophagoides pteronyssinus, role, mucocutaneous lymph node syndrome, man 8435
hypersensitivity, atopic dermatitis, man, Dermatophagoides farinae 8405.
immunohistochemistry, Dermatophagoides farinae, Sarcophaga scabiei 1381.
organ culture, immunotherapy, hypersensitivity, Triatoma protracta 4522.
purification, characterization, Dermatophagoides pteronyssinus 8410.
salivary gland, biological control, pest resistance, Dermacentor andersoni 6058.
skin tests, hypersensitivity, parasites, Canis familiaris, Siphonaptera 8406.
- Antilles**,
taxonomy, morphology, Pericopinae 5606
- Antillocoris pilosulus**,
flight activity, seasonal variations 1977
- Antiosis**,
host plants, feeding effects on, Schizaphis graminum 2054
- Antipais varipes**,
developmental stages, morphology 77
- Antisera**,
immunohistochemistry, vitellogenesis, Locusta migratoria 1133
- Antisolaris notabilis**,
new species, taxonomy, morphology 2406
- Antisipia anna**,
host-parasite interactions, Syzygium jambolana, damage 3593
- Antisipia olivacea**,
larvae, pathogenicity, Paeclimolus fannosus 1001

Subject Index

- Antocha saxicola**, abundance, ecological distribution, activity patterns, Canada, Ontario, Salem Creek 3856
- Antoinella giloni**, new species, taxonomy, morphology, Morocco 4814
- Antonina graminis**, hosts, parasites, Encyrtidae, South Africa 2029
- Anupama**, new genera, taxonomy, India 7208
- Anupama himalayensis**, new species, taxonomy, morphology, India 7208
- Anura**, eggs, larvae association, Diptera, South America 7816
- Anurogryllus arboreus**, stridulation, energy metabolism, oxygen consumption 5021
- Aoudiella aurantii**, association, abundance, Acarina, Egypt 6877, chemical control, effects on yield, Citrus 8580, growth regulators, RO 13-5223, effects on development 6642, parasitoids, toxicity, methidathion 9020, pest control, orchards, effects on community structure, Formicidae 2879, pests, chemical control, insecticides, petroleum 6906, pests, spatial distribution, host plants, microclimate, population levels, Greece, Crete 1256, toxicity, insecticides, methidathion, citrus spray oil 5048
- Aoteaepyeche colonica**, life history, New Zealand, Waitakere R. 451
- Apche degeerii**, morphology, instars 3254
- Apanteles**, life history, Symmetrischema capsica parasites 6720, surveys, geographical distribution, new records, Hungary 3157
- Apanteles congregatus**, parasitoids, emergence, juvenile hormones effects on, *Manduca sexta* 5935
- Apanteles eupydryidis**, parasitoids, host searching behavior, host-parasite interactions, Euphydryas phaeton 8317, parasitoids, host searching behavior, hosts defense mechanisms, Euphydryas phaeton 5932
- Apanteles flavipes**, host preferences, oviposition, host plants 2979
- Apanteles glomeratus**, mating behavior, activity patterns, sex pheromone 2740, mating behavior, body movements, orientation, copulation 7487, nontarget organisms, toxicity, *Bacillus thuringiensis* kurusaki 7379, oviposition experience, diets, infection, *Pieris rapae* crataeva 7497, parasitism, effects on *Beauveria bassiana* pathogenicity, cuticle, *Pieris brassicae* 8132, parasitoids, granulosis virus infection, survival 4190, parasitoids, venom, eggs encapsulation, hosts, *Pieris rapae crucivora* 8325
- Apanteles melanoscelsus**, exploratory behavior, parasites, silk, exposure time, diurnal variations, *Lymantria dispar* 1219, parasites, competition, hosts, *Lymantria dispar*, *Rogas lymantriae* 7545, parasites, discrimination, hosts, infection, nuclear polyhedrosis virus, *Lymantria dispar* 5942, parasitoids, strains, interbreeding, *Lymantria dispar* 8324
- Apanteles onitidis**, parasites, toxicity, insecticides 2655, toxicity, insecticides 8200
- Apanteles plutellae**, pest control, *Bacillus thuringiensis* 1836
- Apanteles rubecula**, new records, China, People's Rep 36
- Apanteles ruficornis**, parasites, factors affecting population decline, pest outbreaks, *Mythimna separata*, India 5301
- Apanteles sages**, parasites, *Sylepta derogata*, Nigeria, Ibadan 5938
- Apanteles smerinthi**, parasitoids, effects on hosts development, *Manduca sexta* 8328
- Apanteles subandinus**, environmental effects, relative humidity, comparison, *Copidosoma koehleri* 1935, parasites, abundance, seasonal variations, South Africa 2122, parasites, incidence, *Phthorimaea operculella*, Australia, Queensland 2828
- Apanteles syleptae**, parasites, *Sylepta derogata*, Nigeria, Ibadan 5938
- Apanteles**, parasites, *Elasmodiplosis lignosellus*, USA, Texas 3577
- Apantia theislingerorum**, new species, Spain 4066
- Apatei pai**, occurrence, abundance, British Isles, Scotland 6705
- Apatiria erminea**, geographical distribution, new records, Australia, North Queensland 2375
- Aphaenogaster famelica**, geographical distribution, check lists, Korea 3146
- Aphaenogaster fulva**, community composition, habitat comparison, USA, South Carolina 1269
- Aphaenogaster longiceps**, feeding behavior, seeds, dispersal, *Lepidosperma laterale*, Eucalyptus 1210
- Aphaenogaster traelae**, community composition, habitat comparison, USA, South Carolina 1269
- Aphalara migrimaculosa**, new species, taxonomy, morphology, USSR, Transcaucasia 6423
- Aphaankerca**, morphology, females, nymphs, Australia, Tasmania 2476
- Aphaninae**, morphology, genitalia 9039
- Aphanisoma hungaricum**, new species, taxonomy, morphology, Hungary 7967
- Aphanistes**, taxonomic revision, new species, taxonomy, morphology, 14 species, North America 6435
- Aphanisus dispar**, predation, insectivores, mosquito larvae, pest control, Saudi Arabia 563
- Aphantopus hyperantus**, coloration, variability, population studies, Finland 2104, population studies, coloration, environmental conditions, human impact, Finland 9186
- Aphelenchus**, grazing, fungi 2132
- Aphelinidae**, flight activity 9116, parasitoids, species composition, Yemen, Arab Rep. 7902, setae, wings, coupling 1726, taxonomy, new genera, new species, morphology 2456
- Aphelinus**, parasites, pests population dynamics, *Macrosiphum rosae*, *Macrosiphum rosaeformis* 4530, wings morphology, identification 4108
- Aphelinus prociphili**, new species, morphology, parasites, *Prociphilus fraxinifolii*, USA, Iowa 39
- Aphelinus semiflavus**, parasites, longevity, fecundity, hosts population density effects on, *Acyrtosiphon pisum* 8318
- Aphelinus thomsoni**, *Drepanosiphum platanoisidis*, oviposition, population dynamics, *Drepanosiphum platanoisidis* 2887
- Aphididae**, abundance, crop fields, disease transmission, insecticides effects on 3042, amino acid composition 195, avoidance behavior, host plants, alarm pheromone, pest control 7337, barley yellow dwarf virus detection, serological tests 6611, biological control, pathogens, *Vernemulium lecanii* 2217, check lists, new records, host plants, Canada, British Columbia 5524, chemical control, insecticides, efficiency 3742, chromosome number 2321, collections, nomenclature, USA, Minnesota, University of Minnesota 7926, crowding effects on population dynamics, activation 9208, developmental genetics, morphology, taxonomy 2335, diets effects on chromosomes banding, enzymatic activity 3091, disease transmission, plant viruses, Australia 3837, dispersal, population structure, association, host plants 8372, ecological distribution, host plants, roots, India 5258, feeding, host plants, viruses vectors, methodology, cages 7253, monitoring methodology, pests population dynamics 725, new records, geographical distribution, India 4734, new records, geographical distribution, India 7909, new records, geographical distribution, India 8688, nucleotide sequence, rRNA 5.8S, rRNA 28S 8082, parasites, host-parasite interactions 1221, parasites, predators, India 4416, pathogens ecology, Entomophthoraceae, France 2622, pathogens, infection, seasonal variations, Entomophthoraceae, France 4213, pest control, barriers, chemical control, *Solanum tuberosum* 684, pest control, irrigation effects on, *Malus domestica* 1385, pests, effects on plants, *Triticum aestivum* 548, plum pox virus vectors, flight activity, orchards 3835, population density, effects on settling behavior, host plants, *Coccinella septempunctata* 2865, population dynamics, mathematical models 8361, population levels, colonization, crops 2891, population status, crop fields, British Isles 6927, predators, nontarget organisms, pesticides toxicity, *Aphidoletes aphidimyza* 8173, predators, phenology, Chrysopidae, Coccinellidae, Syrphidae, British Isles, England 8392, predators, species composition, weeds, Coccinellidae, Chrysopidae 6852, prey, predators, Coleoptera, Diptera, India 4417, sampling, interspecific relationships, cluster analysis, stratification, orchards 5460, soybean mosaic virus vectors, landing behavior, crop fields, *Glycine max* 3825, surveys, India 7110, vectors, maize dwarf mosaic virus transmission 3806, vectors, viruses, disease control, crop fields, oils 7697, viruses transmission 4195
- Aphididae**, parasitoids, keys, taxonomy, pest control 769, parasitoids, species composition, Yemen, Arab Rep. 7902, surveys, new records, Poland 787
- Aphidina**, fossils, phylogeny, oviparity, Tertiary 792
- Aphidius**, parasites, life history, *Dendrocerus* 4382, parasitoids, ecological distribution, abundance, grasslands, British Isles 8393
- Aphidius colemani**, parasitoids, Yemen, Arab Rep. 7902
- Aphidius eadyi**, introduced species, parasites, dispersal, effects on, *Acyrtosiphon pisum*, New Zealand, Helensville 506
- Aphidius frumentarius**, morphology, petiole lateral area, taxonomy 7271
- Aphidius picipes**, abundance, host-parasite interactions, *Metopolophium dirhodum*, *Sitobion avenae* 1228
- Aphidius rosae**, parasites, pests population dynamics, *Macrosiphum rosae*, *Macrosiphum rosaeformis* 4530
- Aphidius smithi**, parasitoids, infestation, effects on hosts reproductive organs, *Acyrtosiphon pisum* 6774, temperature, effects on coloration, integument 7349
- Aphidius uzbekistanicus**, abundance, host-parasite interactions, *Metopolophium dirhodum*, *Sitobion avenae* 1228
- Aphidoletes**, predators, feeding, life cycle, Yugoslavia 3552
- Aphidoletes aphidimyza**, growth, reproduction, food organisms nutritive value effects on, *Myzus persicae* 5678, oviposition, host plants, substrate preferences 6679, predators, bibliographies 7927

Aphidoletes aphidimyza, (continued)

predators, feeding, life cycle, Yugoslavia 3552.
toxicity, pesticides, nontarget organisms 8173

Aphidoletes aphidomyza,

predators, vectors, blueberry shoestring virus, disease control, insecticides.
Illinois pepper 4630

Aphidoletes urticae,

predators, feeding, life cycle, Yugoslavia 3552.

Aphidius smithi,

larvae, hyperparasitism, venom, effects on, paralysis, development, Asaphes
lucens 2820

Aphis,

circadian rhythms, photoreception, thermoregulation 8923
pests, cultivars, resistance, Vigna unguiculata 4614

Aphis citricola,

pesticides effects on, toxicity, enzymatic activity, acetylcholinesterase 1064
pests, temperature, effects on population growth 7619.
settling behavior, locomotor activity, host plants 1243.

Aphis craccivora,

disease transmission, pumpkin mosaic virus, feeding behavior effects on
infectivity 3703
Formicidae 7357

parasites, effects on yield, Vigna sesquipedalis 529

parasites, physiology association, Vigna sesquipedalis 524

pests, crop fields, Cajanus cajan 4553

pests, natural enemies, surveys, India 6943

pests, toxicity, insecticides 7410

population regulation, predators, Vicia sinensis host plants 9188

toxicity, insecticides, pest control 7417

vectors, yellows, Beta vulgaris, Tasmania 6097

Aphis eugeniae,

abundance, population levels, estimation methodology, host plants 2489

Aphis fabae,

association, abundance, Formica neoclara, USA, Colorado 6863

biological control, pathogens, efficacy, Entomophthoraceae 3038

biological control, pests, pathogens, crop fields, Entomophthoraceae 7760

disease transmission, bean yellow mosaic virus, Vicia faba host plants 3707.

feeding, substrate preferences, competition, Acyrthosiphon pisum 5925.

infestation, effects on host plants biochemical characteristics, Beta vulgaris

7781.

life cycle, crop fields damage, pest control, British Isles 3800.

pest control, chemical control, fungicides 4627

pest control, chemosterilants 4575

pests, infestation prediction, Vicia faba 2969

systematics, identification, taxonomy, enzymes 7206

toxicity, insecticides, pest control 9028

toxicity, insecticides, phorate, metabolites 5777

Aphis gossypii,

biological control, pathogens, Verticillium lecanii 8577

disease transmission, vectors, cucumber mosaic virus, Israel 7657

pest control, insecticides, crop protection, Gossypium, Thailand 4622

pest control, insecticides efficacy, Abelmoschus esculentus host plants 7683.

pests, crop fields, Cajanus cajan 4553

pests, infestation, damage, Gossypium 6189

pests, temperature, effects on population growth 7619

population dynamics, pests, Solanum tuberosum, Egypt 6958

population growth, races, abundance, fecundity, 1306.

population levels, estimation, spatial distribution, host plants, Central African

Republic 2899.

population studies, pesticide resistance, pirimicarb 3922.

taxonomy, cytology, chromosomes 7846

toxicity, pesticide residues, insecticides, systematics 7413.

transmission, sweet potato leafhopper mottle virus, Ipomoea setosa, Ipomoea nil

3819.

vectors, plant diseases, mosaic disease 7652

Aphis idaei,

vectors, pathology, raspberry vein chlorosis virus 276.

Aphis mellifera,

cross-pollination, effects on crop yield, methodology 1280.

Aphis nasturtii,

population studies, parthenogenesis 3557.

Aphis nerii,

ectoparasites pests, population regulation, Nerium oleander, USA, California

1276.

pest control, insecticides, host plants, Nerium oleander 722.

taxonomy, cytology, chromosomes 7846.

Aphis pomi,

pest control, chemosterilants 4575.

Aphodinae,

identification keys, Africa 2395

Aphodius,

bioaccumulation, lead, USA, Kansas 608.

guilds, resource utilization, coexistence, dung 9211.

taxonomy, morphology, Italy 3981.

Aphodius khandui,

new species, taxonomy, morphology, Nepal, Himalayas 20.

Aphodius murensis,

new species, taxonomy, morphology, Nepal, Himalayas 20.

Aphodius pokharenis,

new species, taxonomy, morphology, Nepal, Himalayas 20.

Aphodius tasmianae,

milk disease pathogens, infectivity, Scarabaeidae 624.

Aphonia gularis,

synthesis, sex pheromone 2595.

Aphonopelma,

taxonomy, morphology, Costa Rica 3173.

Aphrodinae,

taxonomy, revision, Cicadellidae, Africa 829.

Apkyta,

natural enemies, pest control, Quadraspidiotus perniciosus, Greece 2956.

Aphytis africanus,

methidation, toxicity 9020.

Aphytis coheni,

parasites, host searching behavior, oviposition, Aspidiotus nerii 7542.

Aphytis holoxanthus,

parasites, pest control, Chrysomphalus aonidum, USA, Texas 3798.

Aphytis lepidosaphes,

biological control, Leptomastidea beckii, Spain, Valencia 1458.

Aphytis lignanensis,

oviposition, host plants population density effects on 2166

parasites, host searching behavior, oviposition, Aspidiotus nerii 7542.

Aphytis melinus,

nontarget organisms, toxicity, insecticides carriers 5785.

oviposition, host plants population density effects on 2166.

parasites, host searching behavior, oviposition, Aspidiotus nerii 7542.

Apicotermes lamani,

colonies, nest building 5420.

nest building (non-reproductive), termitaria, workers 6990.

Apicotermitinae,

agonistic behavior, defense mechanisms, social behavior 6219.

Apiculture,

agricultural practices, methodology, Apis mellifera 6177.

antibiotics, residues, honey, larvae, Apis mellifera 2243.

Apis mellifera nests, pests occurrence, Pseudohylocera kerteszi, Colombia 1315.

artificial diets, pollen, honey production, Apis mellifera 5306.

biology, behavior, literature reviews, Apis florea 1436.

breeding, American foulbrood disease resistance, Apis mellifera 3823.

breeding, population genetics, sex determination, Apis mellifera 8659.

breeding selection, stock maintenance, methodology, Apis mellifera 8461.

brood rearing, diets, pollen, Apis mellifera 5310.

catching methods, swarms, synthetic pheromones, Apis mellifera 5292.

chemotherapy, parasites, drugs distribution, colonies, Apis mellifera 8570.

colonial characteristics, aggressive behavior, Apis mellifera 3731.

colonial characteristics, parasites infestation, Varroa jacobsoni, Apis mellifera

5183.

colonial characteristics, queens size, aberrants, Apis mellifera 7731.

colonies, infestation, Apis mellifera, Varroa jacobsoni 2975.

colonies, management, nontarget organisms, insecticides effects on, Apis

mellifera 1433.

comb construction, honey yield 3775.

combs, orientation, Apis mellifera 5319.

combs, wax, strength, Apis mellifera 5317.

developmental programs, Colombia 6206.

disease control, chalkbrood disease infection, Apis mellifera 2234.

disinfection, methyl bromide, Bacillus larvae, Ascopaera apis 8527.

economic analysis, environmental factors, Apis, Bangladesh 1411.

economics, Brazil 4540.

egg production, egg laying, Apis cerana 1145.

environmental factors, Australia 2214.

environmental impact, insecticides encapsulation, economics 7684.

feeding methodology, Apis mellifera 6178.

foraging behavior, seasonal variations, nectar, pollen, Apis mellifera 5320.

France 9330

handling, methodology 1412.

heat balance, hives, methodology 6669.

hives, construction, Apis mellifera 6180.

hives, heating methodology, solar radiation 2998.

hives, infestation, Acarapis woodi, Apis mellifera, Mexico 6181.

hives, occurrence, Megachile relativa, Megachile nivalis, Canada, Saskatchewan

4603.

hives, pest control, chemical control, Apis mellifera, Varroa jacobsoni 4599.

hives, predation damage, Ursus americanus, Apis mellifera 3040.

honey contamination, sterilization, α -radiation, Streptococcus pluton 8475.

honey, physicochemical properties, contamination, microorganisms 8503.

honey production, Canada, Prairie Provinces 8523.

honey production, diets, Apis mellifera 5304.

honey production, economics, Japan 7721.

honey production methodology 2970.

honey production, queens, Apis mellifera 7761.

introduced species, environmental impact, Apidae 6207.

longevity, temperature tolerance, Apis mellifera 2213.

management, breeding, Apis mellifera 5410.

management, methodology, Apis mellifera 7705.

methodology, economic analysis, environmental factors, USA, Alaska 1409.

methodology, economic analysis, Jordan 1414.

mortality, pesticide applications, Apis mellifera 6937.

nectar source, ornamental plants, Apis mellifera, Israel 7714.

nutrient requirement, Apis mellifera 4591.

nutrient requirements, sterols, synthetic diets, Apis mellifera 1407.

orchards pollination, economic analysis, Apis mellifera 1408.

overwintering equipment, hives, Apis mellifera 6176.

overwintering methodology, Apis mellifera 5384.

parasites infestation effects on, control programs, Varroa jacobsoni, Apis

mellifera 2971

parasites infestation, geographical distribution, Varroa jacobsoni, Apis

mellifera 2816.

pest control, killer bees, Apis mellifera adansonii, USA 4636.

pest control, pathogens, Bacillus thuringiensis, Galleria mellonella 3834.

pest control, Varroa jacobsoni, Thripaelaps clareae 7750.

pesticides effects on, Apis mellifera, Mexico 3810.

pesticides, effects on mortality, USA, New York 7752.

pesticides encapsulation, control, USA, Massachusetts 3732.

pests, biological control, pathogens, nuclear polyhedrosis virus, Galleria

mellonella 8456

pests, chemical control, Varroa jacobsoni 4586.

pests, colonies damage, Apis mellifera, Vitula edmandae 1419.

pests, economics, Ursus americanus, USA, Florida 6090.

pests, reviews, Varroa jacobsoni, Acarapis woodi, Thripaelaps clareae 5945.

pollen collections traps, storage, cleaning, methodology, Apis mellifera 1406.

predation, bees, Ursus americanus, Apis mellifera, USA, North Carolina 5379.

production, Apis mellifera, Panama 2212.

production, China, People's Rep. 2974.

production, economics, USSR 2996.

production, hives, mobility 2978.

production, land use effects on, USA, Georgia 6179

products, medical importance, Romania 2928.

protein sources, diets, production, Apis mellifera 3754.

queens introduction, methodology, Apis mellifera 1415.

- Apiculture, (continued)**
 selection, phenotypes, colonial characteristics, *Apis mellifera*, Canada, Alberta 9433.
 weed control, chemical control 2215.
 wood preservatives effects on colonies, *Apis mellifera* 3019.
- Apidae**
 coevolution, host plants, species diversity, North America 1564.
 communication systems evolution, effects on size distribution 748.
 foraging behavior energetics, pollen, *Helianthus annuus* 6735.
 introduced species, apiculture, environmental impact 6207.
 pheromones, survival, survive, foot-print pheromone 3350.
 phylogeny 7882.
 pollination, flowering, *Fraseria carolinensis* 6791.
 pollination, flowering phenology, *Pourouma cecropifolia*, Brazil 4412.
 species composition, Malta 7891.
 sympatry, speciation, host plants, food selection, geographical variations 1544.
 venom, adolapin, purification, characterization 8181.
 venom, hypersensitivity, population studies, man, Australia 9266.
 visual discrimination learning 9083.
- Apioera**
 habitat, activity patterns 5238.
- Apioera exta**
 habitat, phenology, behavior, USA, California 9087.
- Apioera haruspex atrifasciata**
 habitat, phenology, behavior, USA, California 9087.
- Apioera hispida**
 habitat, phenology, behavior, morphology, larvae, USA, California 9087.
 morphology 5238.
- Apioera pearcei**
 habitat, phenology, behavior, USA, California 9087.
- Apion amudariense**
 new species, taxonomy, morphology, USSR, UdSSR 4795.
- Apion angusticollis**
 geographical distribution, morphology, aedeagus, Bulgaria 4710.
- Apion assimile**
 morphology, aedeagus, Bulgaria 4710.
- Apion lethierryi**
 new records, geographical distribution, Bulgaria 4710.
- Apion loti**
 parasites, taxonomy, synonymy, *Trichomalus* 5592.
- Apion scutellare**
 introduced species, biological control, weed control, *Ulex europaeus*, New Zealand 5335.
- Apion tomense**
 new species, taxonomy, morphology, USSR 5557.
- Apion ulidis**
 introduced species, biological control, weed control, *Ulex europaeus*, New Zealand 5335.
- Apis**
 apiculture, economic analysis, environmental factors, pests, Bangladesh 1411.
 apiculture, pests, reviews, Varroa jacobsoni, Acarapis woodi, Tropilaelaps clareae 5945.
 feeding behavior, nectar secretion effects on, *Brassica campestris* 544.
 pollination, efficiency 557.
 pollination, orchards, *Prunus americana* 550.
 toxicity tests, dimilin, larvae 7406.
 venom, man hypersensitivity (immediate), hypersensitization 6053.
- Apis cerana**
 colonies, damage, parasites, Varroa jacobsoni 4380.
 egg laying, egg production, apiculture 1145.
 feeding behavior, nectar secretion effects on, *Brassica campestris* 544.
 sacbrood virus, antigenic characteristics, isolates, Thailand 5727.
- Apis cerana indica**
 acetylcholinesterase, biochemical analysis 4996.
 central nervous system, acetylcholinesterase, characterization, activity, inhibition 2560.
- Apis cerana japonica**
 diploids, drones, chromosomes 1546.
- Apis dorsata**
 feeding behavior, nectar secretion effects on, *Brassica campestris* 544.
 parasites, new species, taxonomy, morphology, Sri Lanka 3973.
- Apis florea**
 apiculture, biology, behavior, literature reviews 1436.
 display, wagtail dance, food sources, orientation, sky 8267.
 feeding behavior, nectar secretion effects on, *Brassica campestris* 544.
- Apis mellifera**
 activity patterns, environmental effects 4452.
 activity patterns, night, USA, New York 8287.
 alarm pheromone response, environmental effects 417.
 anatomy, muscles, exoskeleton, methodology 8056.
 antennal sensilla, genetic factors, inheritance 7060.
 antibiotics, chloramphenicol, effects on hemolymph proteins, nutrient deficiency 8110.
 apiculture, agricultural practices, methodology 6177.
 apiculture, American foulbrood disease resistance, breeding 3823.
 apiculture, antibiotics, residues, honey, larvae 2243.
 apiculture, breeding, population genetics, sex determination 8659.
 apiculture, breeding selection, stock maintenance, methodology 8461.
 apiculture, chemotherapy, parasites, drugs distribution, colonies 8570.
 apiculture, colonial characteristics, aggressive behavior 3731.
 apiculture, colonial characteristics, queens size, aberrants 7731.
 apiculture, colonies, infestation, Varroa jacobsoni 2975.
 apiculture, comb construction effects on swarming, honey yield 3775.
 apiculture, environmental factors, Australia 2214.
 apiculture, environmental impact, insecticides encapsulation, economics 7684.
 apiculture, equipment, overwintering 6176.
 apiculture, feeding methodology 6178.
 apiculture, hives, construction 6180.
 apiculture, hives damage, predation, *Ursus americanus* 3040.
 apiculture, hives, heating methodology, solar radiation 2998.
 apiculture, honey production, diets 5304.
 apiculture, honey production, diets, protein sources 3754.
 apiculture, honey production, queens 7761.
 apiculture, longevity, temperature tolerance 2213.
 apiculture, management, methodology 7705.
 apiculture, management, nontarget organisms, insecticides effects on 1433.
- Apis mellifera, (continued)**
 apiculture, mortality, pesticide applications 6937.
 apiculture, nectar source, ornamental plants, Israel 7714.
 apiculture, nutrient requirement 4591.
 apiculture, nutrient requirements, sterols, synthetic diets 1407.
 apiculture, overwintering methodology 5384.
 apiculture, parasites infestation, geographical distribution, Varroa jacobsoni 2816.
 apiculture, pest control, pathogens, *Galleria mellonella*, *Bacillus thuringiensis* 3834.
 apiculture, pest control, Varroa jacobsoni, Tropilaelaps clareae 7750.
 apiculture, pesticides effects on, Mexico 3810.
 apiculture, pesticides encapsulation, control, USA, Massachusetts 3732.
 apiculture, pests, colonies damage, *Visula edmandsae* 1419.
 apiculture, pests, colonies damage, *Ursus americanus*, USA, Florida 6090.
 apiculture, pollen collections traps, storage, cleaning, methodology 1406.
 apiculture, pollination, orchards, economic analysis 1408.
 apiculture, predation, bees, *Ursus americanus*, USA, North Carolina 5379.
 apiculture, production, Panama 2213.
 apiculture, queens introduction, methodology 1415.
 apiculture, synthetic pheromones, attractancy 5292.
 artificial diets, pollen, honey production, brood rearing 5306.
 artificial insemination, semen, storage, freezing, nitrogen, viability 1877.
 attractants, (E)-9-oxo-2-decenoic acid, pheromones 8533.
 beehives, association, *Gluconobacter*, *Acetobacter* 8310.
 beehives, occurrence, *Aeroglyphus robustus* 2026.
 biochemical analysis, carbohydrates 4157.
 brain amines, effects on conditioned response, unconditioned response, olfactory stimuli 6687.
 breeding, apiculture management 5410.
 breeding, insemination, spermatozoa 8553.
 breeding, selection methodology, mathematical models, statistical genetics 8620.
 calories, pollen 8028.
 carboxan, diets, mortality, nontarget organisms 6201.
 caste differentiation, queens, diets effects on 376.
 castes development, environmental effects, neuroendocrine system 3338.
 chalkbrood disease, mortality, pathogens, *Ascosphaera* api 803.
 chalkbrood disease, occurrence, Japan 1816.
 characterization, *Apis mellifera*, *Tetralopis*, *Rhodotorula* 2013.
 chemical stimuli effects on hoarding behavior 4322.
 colonial characteristics, electric fields effects on, power lines 7570.
 colonial characteristics, phenotypes, selection, Canada, Alberta 9433.
 colonial characteristics, queens pheromones effects on castes, social behavior 3044.
 colonial characteristics, social behavior, queens, workers 3051.
 colonies, *Bacillus* larvae spores, distribution, American foulbrood 1016.
 colonies, diet periodicity, oxygen consumption, metabolism 5417.
 colonies, electric currents effects on, power lines 1866.
 colonies, infestation, parasites, Varroa jacobsoni, Brazil 4456.
 colonies, metabolism, energetics, oxygen consumption 4641.
 colonies, population density, food availability, effects on brood rearing 8233.
 colonies, toxicity, diflubenzuron, nontarget organisms 3446.
 colonies, wood preservatives effects on 3019.
 combs, orientation, apiculture 5319.
 combs, surface area, honey hoarding behavior 8585.
 combs, wax, strength 531.
 compound eyes, cornea, ultrastructure, optical properties, visual perception 144.
 conditioned reinforcement, extinction, potentiation, overshadowing, odor, color 5874.
 consanguinity, population genetics 8666.
 consummatory behavior, measuring techniques 3572.
 cross-pollination, flowers, efficiency, *Solanum tuberosum* 1285.
 defective mutant, stings 768.
 development time, geographical distribution effects on 375.
 diflubenzuron effects on reproduction, colonies 6622.
 disease control, chalkbrood disease infection 2234.
 disease resistance, brood disease, larvae removal, workers 8589.
 eggs, development, males, females, temperature effects 1878.
 eggs, enzymatic activity, malate dehydrogenase 2563.
 electrophoresis, enzymes, population studies, identification, africanized honeybees 8026.
 extracts, effects on survival, intraspecific relationships 1947.
 fatty acids, head, workers, age 8090.
 feeding behavior, effects on yield, *Malus domestica* 1237.
 feeding behavior, food preferences, pollen, colonies, Canada, Alberta 2010.
 feeding behavior, nectar reward effects on 542.
 flight activity, optomotor response, visual stimuli, compound eyes 4981.
 flight muscle, proteins, purification, characterization 2578.
 food conversion, energy budget, production efficiency, honey 873.
 food organisms, diets, effects on phenotypes, *Leptothorax* 3373.
 food organisms, predation, *Misumena vatia* 457.
 food preferences, specialization, flowers, food composition, saccharides 1998.
 food sources, pollination, *Thupa occidentalis*, USA, Connecticut 4400.
 foraging behavior, chemical perception, attractants, pollinators 4577.
 foraging behavior, energetics, pollen, *Helianthus annuus* 6735.
 foraging behavior, flight activity, microwave radiation effects on 5877.
 foraging behavior, humidity, humidity effects on, *Zea mays* 2046.
 foraging behavior, pollen attractancy 8302.
 foraging behavior, pollen, diurnal variations, *Zea mays* 5923.
 foraging behavior, Rhododendron pollen, honey toxicity, Nepal 5321.
 geographical distribution, introduced species, South America 3948.
 habitat preferences, nests, limiting factors 452.
 hives, infestation, *Acarapis woodi*, Mexico 61815.
 hives, pest control, chemical control, Varroa jacobsoni 4599.
 hoarding behavior, sucrose, 2-heptanone 8300.
 homing behavior, landmarks, food sources, foraging behavior 5113.
 honey contamination, apiculture, sterilization, α -radiation, *Streptococcus* piuton 8475.
 honey production, correlation analysis, sugar plasma levels 5325.
 honey production, foraging behavior, comparison, strains 4595.
 identification, analysis, allozymes, morphology 53.
 inbreeding effects on colonial characteristics, survival 1548.
 induction, enzymatic activity, hemolymph α , α -trehalase 164.
 infection, diseases, *Nosema* api, USA 4194.
 infection, measuring techniques, *Nosema* api 6081.
 insecticides effects on foraging behavior, crop fields 4475.

Apis mellifera, (continued)

- insulin-like peptides, purification, royal jelly 5685
longevity, races, heritability 1559
magnetic fields receptors, orientation, communication 3302
maintenance, storage, queens 8547
mandibular glands, secretion cells, ultrastructure, workers 4951
mandibular glands secretions, chemical composition, fatty acids 242
mating behavior, oviposition 4293
mating, insemination, effects on oviposition 8259
methodology, dosage, feeding 66
microwave radiation effects on longevity, food consumption 7502
milky disease, pathogenesis 7373
morphogenesis, larvae, isoenzymes, hemolymph 5827
morphology, antennal sensilla, olfactory perception, age 915
morphology, behavior, pheromones, seeds, *Trifolium repens* 1970
mortality, experimental infection, *Totulopsis apicola* 1808
mutation, eye color 1524
Nasosov gland pheromones, attractancy, workers 5115
nectar harvesting regulation, honey storage 8593
nests, pests, *Pseudohylocera kerteszi*, Colombia 1315
nutrition, 10-hydroxydecanoic acid, sterols, larvae 8080
optic ganglia, neurons, morphology, ultrastructure 6525
orientation, foraging behavior, navigation behavior 5865
orientation, polarization, light 7507
parasites infection, quantitation, population characteristics, *Nosema apis* 1024
parasites, infestation, colonial characteristics, *Varroa jacobsoni* 5183
parasites infestation, control programs, *Varroa jacobsoni* 2971
parasites, spores disintegration, *Nosema apis* 6610
parathion-methyl bioaccumulation, bioaccumulation, parathion-methyl methodology 1069
parathion-methyl, comparison, mortality 312
pathogens, development, *Nosema apis* 4210
pathogens, phages, isolation, morphology, ultrastructure, *Bacillus larvae* 8138
pathogens, reviews, *Ascophaera apis*, *Ascophaera major*, *Arrhenosphaera cranei* 8156
pathogens, viruses, physicochemical properties 1033
pesticide residues, insecticides, parathion, toxicity, effects on, cells, chemical analysis 298
pesticides, toxicity evaluation, pirimicarb, ethiofencarb, fenitrothion 8171
pheromones production, chemical composition, seasonal variations 212
pheromones, volatiles, chemical analysis 8116
phospholipase A₂, venom, queens, workers 3431
photoreceptors, physiology, light adaptations 6534
pollen, diets, brood rearing, apiculture 5310
pollination, agricultural practices, effects on yield, *Helianthus annuus* 3730
pollination, agricultural practices, *Medicago sativa*, USA, California 2941
pollination, attractancy, *Glycine max* 5972
pollination, attractants, *Malus domestica* 5411
pollination, effects on fruits yield 2186
pollination, efficiency 557
pollination efficiency, *Cucurbita pepo* 6797
pollination, flowering, *Fraxea carolinensis* 6791
pollination, hybrids, agricultural practices, *Gossypium* 6182
pollinators, *Helianthus annuus*, USA, Texas, Lower Rio Grande Valley 9155
population studies, biometrics, data analysis 7924
population studies, races, ecological distribution, Oman 5216
predation, feeding immunity, *Apis brevidens* 9192
proteolysis, sexual reproduction, USA, California 323
queens, broods, effects on thermoregulation, metabolism, colonies 8590
queens chemical extracts, effects on fecundity, *Tenebrio molitor* 8226
queens, juvenile hormones, plasma levels 5001
queens, storage, methodology 5339
queens, trans-9-oxo-dec-2-enoic acid, secretions, pheromones 8225
races, hybrids, comparative studies, hemolymph carbohydrates 771
rearing, ovary development, oviposition 4279
reproduction, aggressive behavior, disease resistance, pollution effects, exhausts 1940
retina, oxygen exchange, energy requirements 183
retina, retinal-binding protein, characterization, spectrophotometry 8919
royal jelly, fatty acids, lipid composition 3390
royal jelly, queen substance, synthesis 5697
seasonal variations, nectar, pollen, foraging behavior 5320
social behavior, mating behavior, genetics 1543
spermatozoa, survival, amino acids effects on 4277
starvation detection, thorax glucose levels 194
swarming behavior, queens pheromones effects on 746
swarms, nesting preferences 8594
swarms, workers, body weight estimation, population studies 8027
thermoregulation, swarms, energetics 240
toxicity, herbicides, nontarget organisms 5044
toxicity, pesticide applications, crop fields, *Zea mays* 6202
venom, antigenic characteristics 1366
venom, melittin, pH effects on conformation, C.D. 4206
venom, toxicity, antigenicity, detoxification 5041
vision, eye, histology, comparative studies, *Bombus hortorum* 904
visual discrimination, color 3301
visual discrimination learning, color, flowers, cross-pollination 9083
workers, emergence, mortality, queens age effects on 8595
workers, juvenile hormones, hemolymph proteins, polyphenism 3339
workers, life span, dry weight 8208
- Apis mellifera adami**,
new subspecies, taxonomy, morphology, Crete 4869
- Apis mellifera adansonii**,
apiculture, pest control, killer bees, USA 4636
new records, range extension, Panama, Darien, Santa Fe 5537
pests, killer bees, Central America, workers 5210
swarms, dispersal, engorgement, workers 5210
visual discrimination learning, color, forms, light intensity 5123
- Apis mellifera adansonii**,
mulate dehydrogenase activity, genotypes, comparison, Africanized honey bee 7062
- Apis mellifera adansonii**,
boarding behavior, sucrose, 2-heptanone 8300
- Apis mellifera carnica**,
drones, fitness, inbreeding effects on 4697
swarms, homing behavior, habitat preferences 6991
visual communication, dialects, foraging behavior, range 5118

Apis mellifera carnica, (continued)

- visual discrimination, color brightness, light intensity, achromatic vision 4973
visual discrimination, color, light intensity, brightness discrimination learning, achromatic vision 4974
- Apis mellifera caucasicus**,
population studies, biometrics, morphology, France 8058
swarms, homing behavior, habitat preferences 6991
- Apis mellifera ligustica**,
population studies, biometrics, morphology, France 8058
queens sex pheromone, extracts, attractancy, workers 8272
visual communication, dialects, foraging behavior, range 5118
- Apis mellifera mellifera**,
colonial characteristics, trophallaxis, chemical communication, castes 6992
orientation, navigation behavior, light polarization 8263
- Apis mellifica**,
acetylcholinesterase, photoreceptors, histochemistry, eye 3299
flight activity, energetics, physiology, age effects 4241
 α -D-glucosidase, chloramphenicol inhibition 8936
orientation, magnetic fields, geotaxis 3537
pollination, effects on flowering phenology, yield, *Brassica napus oleifera* 4582
queens pheromones, effects on workers, survival 4647
scent marking behavior, foraging behavior 5869
- Apis mellifica carnica**,
colonies, asphyxia tolerance, propolis effects on 1413
- Apium graveolens**,
pest control, chemical control, *Lepidoptera*, USA, California 9343
pests, feeding site preferences, *Lepidoptera* 8550
- Aplonia caesar**,
population status, parasites, *Ostrinia nubilalis*, USA, Connecticut 8399
- Aptomys xylota**,
aggregation behavior, parasitoids, USA, New York 5143
- Apogagrus**,
taxonomic revision, morphology 4025
- Apocephalus**,
parasites, effects on competition, defensive behavior, *Pheidole dentata*, *Solenopsis texana* 3576
- Apocheiridium**,
new species, taxonomy, morphology, Kenya 4768
- Aporcia**,
mortality, traps 5615
ventral nerve cord anatomy, comparison, families 8917
- Apodeme**,
morphology, age methodology, *Cochliomyia hominivorax* 8017
- Apodemus mormo**,
syndemic populations, phenotypes, taxonomy, morphology, USA, Arizona, Santa Cruz Co 6878
- Apogonalia grossa**,
oviposition, host plants, Brazil 6668
- Apoidea**,
coxae, morphology, comparison 6511
surveys, host plants, pollination, USSR 789
venom, stings, sensitivity, man, reviews 6616
- Aponomma**,
parasites, geographical distribution, *Reptilia*, Australia 3584
- Aponomma hydrosauri**,
aggregation pheromone, aggregation behavior 1922
geographical distribution, parasitic populations, *Amblyomma albolimbatus*, Australia, Western Australia 5218
mating behavior, courtship, reproductive isolation 7494
parasites, competition, sexual reproduction, *Amblyomma albolimbatus*, *Amblyomma limbatum* 5939
pheromones, attractancy, conspecifics 7332
- Aponychus taishanensis**,
new species, taxonomy, morphology, China, People's Rep. 3972
- Aporia crataegi**,
proteins, metabolism, nuclear polyhedrosis virus infection effects on 8987
- Apotomis inflata**,
species identification, comparison, genitalia, morphology, *Apotomis semifasciana* 82
- Apotomis semifasciana**,
species identification, comparison, genitalia, morphology, *Apotomis inflata* 82
- Appendages**,
abdomen, sense organs, *Gryllus domesticus* 803
malformations, pigmentation, *Ephemeroptera*, *Plecoptera*, Sweden, Medelpad, Laxan R. 4656
morphology, pectines, dentition, *Tityus cambridgei*, *Rhopalurus laticauda* 4942
- Appetitive conditioning**,
Phormia regina 9078
- Application**,
sex pheromone, meteorology, pest control, *Pectinophora gossypiella* 4596
- Applications**,
insecticides, poultry ectoparasites, chemical control, *Ornithonyssus sylvarum* 1387
methodology, biological control, fruit trees pests, *Bacillus thuringiensis*, *Archips argyrospilus* 679
methodology, insecticides, chemical control, *Nephantis serripina* 1396
- Apisiphys capicum**,
life history, Symmetrischema capsica parasites 6720
- Apterallipus parvulus**,
rare species, geographical distribution, abundance, USA, California, Lagunita L. 2288
- Aptero stigma dentigerum**,
colonial characteristics, sex ratio, population dynamics 3846
sex ratio, queens mortality, workers production 3047
- Apterygothrips gilvipes**,
new species, taxonomy, morphology, Canary Islands 849
- Apis bradfieldi**,
feeding immunity, predation, *Apis mellifera* 9192
- Aquatic animals**,
catching methods, samplers, traps, crop fields, *Insecta* 5624
communication, vibratory stimuli, surface water, reviews, *Gerridae* 5868
environmental surveys, wetlands, *USA*, Canada 3930
hemoglobin physiology, oxygen exchange, buoyancy, *Anisops assimilis* 1743
life history, ecology, *Baetisca berneri*, USA, West Virginia, Mingo Co. 2292
pollution effects, colonization, species diversity, *Hygrobatas fluviatilis* 1939
secondary production, environmental factors, *Parapsyche cardis*, *Dipterona*

Aquatic animals, (continued)

- modesta, USA, Georgia 2291
- surveys, rivers, Ephemeroptera, Czechoslovakia, Latorica R. 2355
- taxonomy, identification keys, Dytiscidae, Brazil 809
- water temperature, evolution ecology, reviews, Insecta 6235

Aquatic environment,

- adaptations, parasites, asexual reproduction, Entomophthora conica, Entomophthora rhizospora, Insecta 1009
- emergence traps, catching methods, Chironomidae 6471
- environmental effects, toxins, development, survival, Chlorella ellipsoidea, Culicidae 6691
- pest control, pesticide applications, equipment, Culicidae 8848
- predatory behavior, webs, structure, function, Wendigilarda 1967
- records, occurrence, geographical distribution, Simulium defoliaris, Prosimulium onychodactylum, USA, California, San Geronimo Mts 1572
- water chemistry, population dynamics, species composition, Aedes 9376
- weed control, introduced species, Eichhornia crassipes, Neochetina eichhorniae, USA, Louisiana 1254

Aquatic organisms,

- hosts, pathogens asexual reproduction, Entomophthora conica, Entomophthora rhizospora, Insecta 1809
- parasites, Acarina, Insecta, Acarina, Protozoa 7022
- physiology, morphology, flight activity, adults, juveniles, Insecta 1486
- pollution effects, diflubenzuron, community composition, streams, Insecta 7024
- samplers, methodology, Coleoptera 4918
- sound production, stridulation, communication, Corixidae 8615
- toxicity, nicotine, Insecta 9371
- toxicity, Simulium larvicides, Insecta 9016

Aquatic plants,

- biological control, Arzama densa, Eichhornia crassipes 3550
- weed control, biological control, Eichhornia crassipes, Cyrtobagous singularis 5316

Aquatic weeds,

- biological control, Hydrilla verticillata, Parapoyx rugosalis, USA 2204

Aquilegia caerulea,

- hosts plants, flowers color, pollinators effects on, Hyles lineata 2834

Arabis,

- new species, taxonomy, morphology, Pseudoanthidium micronites, Pachyanthidium semilunatum, Anthidium flavorum, Anthidium tergomarginatum 5596

Arcterus fasciculatus,

- hosts, parasites infestation, Pyemotes tritici, USA, Florida 5188

Archis hypogaea,

- crop fields, pests, damage, Isoptera 5360
- foliage age, effects on, feeding, oviposition, longevity, Spodoptera frugiperda 382

Archis,

- host plants, infestation, pests, Cydia pychora, India 6948

Archis,

- host plants, new records, Achaea janita 6800

Archis,

- host plants, oviposition, Heliothis zea 6106

Archis,

- host plants, varieties, population growth, pests, Spodoptera litura 6913

Archis,

- infestation effects on foliage nutrients, Tetranychus urticae 3794

Archidula,

- activity patterns, abundance, seasonal variations, USA, New Mexico 1953

Archidula,

- allochthonous input, stream energetics 8373

Archidula,

- bites, symptoms, therapy 668

Archidula,

- food organisms, feeding behavior, food preferences, Sceliphron madraspatanum conspiciatum 2806

Archidula,

- new records, geographical distribution, Austria, North Tyrol, Central Alps 7069

Archidula,

- new records, Paanomonops sulcifrons, Lepthyphantes leptyphanthus, Aulenus aurantacus, Belgium 9483

Archidula,

- parasites, man, identification methodology 8423

Archidula,

- species composition, association, Zygothymus simplex, Namibia, Namib Desert 9160

Archidula,

- species composition, inventories, Costa Rica 7124

Archidula,

- species composition, inventories, Costa Rica 7124

Archidula,

- species composition, inventories, Costa Rica 7124

Archidula,

- species composition, inventories, Costa Rica 7124

Archidula,

- species composition, inventories, Costa Rica 7124

Archidula,

- species composition, inventories, Costa Rica 7124

Archidula,

- species composition, inventories, Costa Rica 7124

Archidula,

- species composition, inventories, Costa Rica 7124

Archidula,

- species composition, inventories, Costa Rica 7124

Archidula,

- species composition, inventories, Costa Rica 7124

Archidula,

- species composition, inventories, Costa Rica 7124

Archidula,

- species composition, inventories, Costa Rica 7124

Archidula,

- species composition, inventories, Costa Rica 7124

Archidula,

- species composition, inventories, Costa Rica 7124

Archidula,

- species composition, inventories, Costa Rica 7124

Archidula,

- species composition, inventories, Costa Rica 7124

Archidula,

- species composition, inventories, Costa Rica 7124

Araneae, (continued)

- ecological distribution, habitat, Belgium 7582
- eggs, surface properties, ultrastructure 8039
- gas exchange, respiration 5672
- habitat preferences, webs, predation, guilds 1959
- new records, geographical distribution, Pakistan, Lahore 9488
- occurrence, Sweden 4717
- photography, methodology, equipment 7249
- population dynamics, species composition, crop fields, German Dem. Rep., Leipzig 4571
- silk, physical properties 5718
- silk secretion, methodology 8856
- species composition, ecological distribution, bark, Europe 9177
- species richness, biogeography, islands, South Africa Coast 6848
- surveys, crop fields, insecticides, effects on community composition, Sweden 4459
- venom, poisoning, man 8183
- webs, aerosols, bacteria, sampling 8469
- webs, escape behavior, Insecta 6732
- webs, mechanical stimuli, transmission, vibrations 5913

Araneidae,

- abundance, biomass, species diversity, forests, Czechoslovakia 613

- ecology, habitat comparison, webs, Costa Rica 1272

- predators, pest control efficiency, Nezara viridula 607

- stings 664

- webs, food organisms escape behavior, Lepidoptera 454

- avoidance behavior, defensive behavior, predators 9117

- foraging behavior, strategy, webs, site location 5170

- species composition, abundance, habitat, Czechoslovakia 5223

Araneus,

- predators, insecticides effects on, pest control, Nilaparvata lugens 6162

- Araneus diadematus, coloration, polymorphism, genetic factors 7064

- Araneus marmoreus, coloration, polymorphism, genetic factors 7064

- Araneus trifolium, foraging behavior, predation, energetics, habitat variation 8297

- Arachnoidius styetanus, new genera, new species, taxonomy, morphology, Canada, Ontario 5546

- Arboreus, vectors, population dynamics, mortality, Aedes africanus, Uganda 8369

- Arboreus, transmission, activity patterns, Culicidae, Brazil 4498

- transmission, Culex annulirostris, Australia 3698

- Archanara geminipuncta, diapause, effects on parasites, Lydella thompsoni 1857

- Archeocyrtella, taxonomy, morphology, new genera, 4 genera, new species, 2 species 3183

- Archeocyrtella, taxonomy, morphology, new genera, 4 genera, new species, 2 species 3183

- Archeocyrtella, taxonomy, morphology, new genera, 4 genera, new species, 2 species 3183

- Archeocyrtella, taxonomy, morphology, new genera, 4 genera, new species, 2 species 3183

- Archeocyrtella, taxonomy, morphology, new genera, 4 genera, new species, 2 species 3183

- Archeocyrtella, taxonomy, morphology, new genera, 4 genera, new species, 2 species 3183

- Archeocyrtella, taxonomy, morphology, new genera, 4 genera, new species, 2 species 3183

- Archeocyrtella, taxonomy, morphology, new genera, 4 genera, new species, 2 species 3183

- Archeocyrtella, taxonomy, morphology, new genera, 4 genera, new species, 2 species 3183

- Archeocyrtella, taxonomy, morphology, new genera, 4 genera, new species, 2 species 3183

- Archeocyrtella, taxonomy, morphology, new genera, 4 genera, new species, 2 species 3183

- Archeocyrtella, taxonomy, morphology, new genera, 4 genera, new species, 2 species 3183

- Archeocyrtella, taxonomy, morphology, new genera, 4 genera, new species, 2 species 3183

- Archeocyrtella, taxonomy, morphology, new genera, 4 genera, new species, 2 species 3183

- Archeocyrtella, taxonomy, morphology, new genera, 4 genera, new species, 2 species 3183

- Archeocyrtella, taxonomy, morphology, new genera, 4 genera, new species, 2 species 3183

- Archeocyrtella, taxonomy, morphology, new genera, 4 genera, new species, 2 species 3183

- Archeocyrtella, taxonomy, morphology, new genera, 4 genera, new species, 2 species 3183

- Archeocyrtella, taxonomy, morphology, new genera, 4 genera, new species, 2 species 3183

- Archeocyrtella, taxonomy, morphology, new genera, 4 genera, new species, 2 species 3183

- Archeocyrtella, taxonomy, morphology, new genera, 4 genera, new species, 2 species 3183

- Archeocyrtella, taxonomy, morphology, new genera, 4 genera, new species, 2 species 3183

- Archeocyrtella, taxonomy, morphology, new genera, 4 genera, new species, 2 species 3183

- Archeocyrtella, taxonomy, morphology, new genera, 4 genera, new species, 2 species 3183

- Archeocyrtella, taxonomy, morphology, new genera, 4 genera, new species, 2 species 3183

- Archeocyrtella, taxonomy, morphology, new genera, 4 genera, new species, 2 species 3183

- Archeocyrtella, taxonomy, morphology, new genera, 4 genera, new species, 2 species 3183

- Archeocyrtella, taxonomy, morphology, new genera, 4 genera, new species, 2 species 3183

- Archeocyrtella, taxonomy, morphology, new genera, 4 genera, new species, 2 species 3183

- Archeocyrtella, taxonomy, morphology, new genera, 4 genera, new species, 2 species 3183

- Archeocyrtella, taxonomy, morphology, new genera, 4 genera, new species, 2 species 3183

- Archeocyrtella, taxonomy, morphology, new genera, 4 genera, new species, 2 species 3183

- Archeocyrtella, taxonomy, morphology, new genera, 4 genera, new species, 2 species 3183

- Archeocyrtella, taxonomy, morphology, new genera, 4 genera, new species, 2 species 3183

- Archeocyrtella, taxonomy, morphology, new genera, 4 genera, new species, 2 species 3183

- Archeocyrtella, taxonomy, morphology, new genera, 4 genera, new species, 2 species 3183

- Archeocyrtella, taxonomy, morphology, new genera, 4 genera, new species, 2 species 3183

- Archeocyrtella, taxonomy, morphology, new genera, 4 genera, new species, 2 species 3183

- Archeocyrtella, taxonomy, morphology, new genera, 4 genera, new species, 2 species 3183

- Archeocyrtella, taxonomy, morphology, new genera, 4 genera, new species, 2 species 3183

- Archeocyrtella, taxonomy, morphology, new genera, 4 genera, new species, 2 species 3183

- Archeocyrtella, taxonomy, morphology, new genera, 4 genera, new species, 2 species 3183

- Archeocyrtella, taxonomy, morphology, new genera, 4 genera, new species, 2 species 3183

- Archeocyrtella, taxonomy, morphology, new genera, 4 genera, new species, 2 species 3183

- Archeocyrtella, taxonomy, morphology, new genera, 4 genera, new species, 2 species 3183

- Archeocyrtella, taxonomy, morphology, new genera, 4 genera, new species, 2 species 3183

- Archeocyrtella, taxonomy, morphology, new genera, 4 genera, new species, 2 species 3183

- Archeocyrtella, taxonomy, morphology, new genera, 4 genera, new species, 2 species 3183

- Archeocyrtella, taxonomy, morphology, new genera, 4 genera, new species, 2 species 3183

- Archeocyrtella, taxonomy, morphology, new genera, 4 genera, new species, 2 species 3183

- Archeocyrtella, taxonomy, morphology, new genera, 4 genera, new species, 2 species 3183

- Archeocyrtella, taxonomy, morphology, new genera, 4 genera, new species, 2 species 3183

- Archeocyrtella, taxonomy, morphology, new genera, 4 genera, new species, 2 species 3183

- Archeocyrtella, taxonomy, morphology, new genera, 4 genera, new species, 2 species 3183

- Archeocyrtella, taxonomy, morphology, new genera, 4 genera, new species, 2 species 3183

- Archeocyrtella, taxonomy, morphology, new genera, 4 genera, new species, 2 species 3183

- Archeocyrtella, taxonomy, morphology, new genera, 4 genera, new species, 2 species 3183

- Archeocyrtella, taxonomy, morphology, new genera, 4 genera, new species, 2 species 3183

- Argas africanus**,
disease transmission, pathogens, domestic animals 4501.
toxins, paralysis, infestation 1352.
- Argas arboreus**,
amino acid biosynthesis, guanine 8954.
lateral neurosecretory cells, peritremal glands, morphology, histology 8069
prothoracic pigment, hemolymph, body fluids, blood meals 6540
- Argas persicus**,
disease transmission, pathogens, domestic animals 4501.
life cycle, oviposition, development, survival 1181.
nymphs, infestation, livestock 2041.
toxins, paralysis, infestation 1352
- Argas robertsi**,
occurrence, geographical distribution, India, Tamil Nadu 9216
- Argasidae**,
cuticle, structure, function, reviews 5658
disease transmission, Spirochetosis, infection, man 9245
isolation, *Chim virus*, pathogenicity 8985.
resting, mortality 8847.
- Arge nigritoides**,
larvae, aggregation, crowding, effects on, mortality, development 2696
larvae, factors affecting aggregation behavior 464.
- Arge nipponensis**,
larvae, aggregation, crowding, effects on, mortality, development 2696.
- Argemina**,
dispersal, flight activity, marking, *Triatona infestans* 1263.
geographical distribution, high-altitude environment, abundance, *Liriomyza
huidobrensis* 6704.
natural enemies, parasites, predators, *Neochetna bruchi*, *Neochetna eichhorniae*
8379.
new species, *Acanthoscelides comptus*, *Acanthoscelides caracallae* 3186.
new species, taxonomy, morphology, *Hypocococcus pungens* 1639
new species, taxonomy, morphology, *Plocopsylla angusticeps*, *Hectopsylla gracilis*
7241
new species, taxonomy, morphology, *Pseudomyopa punctipennis*, *Thecophora rufifrons*
6392.
occurrence, seasonal variations, cattle, *Amblyomma* 9265
Ochetina bruchi, *Onychylis crenatus*, biology, host specificity, aquatic plants
2053.
taxonomy, keys, morphology, Pompidinae 1655.
- Argentina**, Buenos Aires,
population studies, life history, *Coptopteryx vindis*, *Coptopteryx argentina*.
Coptopteryx gayi 5237.
- Argentina**, Misiones, Iguazu,
new species, taxonomy, morphology, *Heterina mendezi* 6452
- Argentine Basin**,
new species, taxonomy, morphology, *Copidognathus* 8718.
- Arginine**,
catabolism, L-canavanine effects on, *Manduca sexta* 1763.
- Argiope**,
eggs, larvae feeding, *Megalasia argiopephaga* 7966.
webs, glycoprotein composition 937.
- Argiope aurantia**,
cold tolerance, survival, juveniles 6028
respiration, temperature effects, diapause 1097.
vibratory stimuli, physical activity, behavior response 4320.
webs, glycoprotein composition 937
webs structure, stabilimnetas, defense mechanisms 1990.
- Argiope brunneicincta**,
predatory behavior, food preferences, *Lepidoptera* 5171.
webs structure, stabilimnetas, defense mechanisms 1990.
- Argiope lobata**,
webs structure, stabilimnetas, defense mechanisms 1990
- Argiope trifasciata**,
foraging behavior, predation, energetics, habitat variation 8297.
webs, glycoprotein composition 937.
webs structure, stabilimnetas, defense mechanisms 1990
- Argiopidae**,
webs, food organisms escape behavior, *Lepidoptera* 454.
- Argyrotaenia sorbella**,
new species, taxonomy, morphology, Hungary 7995.
- Argyrodes baboquivari**,
cleptoparasitism, predation, feeding behavior 1996.
- Argyrodes laticollis**,
cleptoparasitism, predation, feeding behavior 1996.
- Argyrodes subdulus**,
cleptoparasitism, predation, feeding behavior 1996.
- Argyrogramma albastrata**,
hosts, parasitoids bionomics, *Euplectrus kuwanae* 1223.
- Argyrotaenia velutinana**,
sex pheromone, chemical composition, variability, population studies 1772.
- Arhopalus rusticus**,
geographical distribution, morphology, British Isles 6304.
- Aril**,
pest control, crop fields, agricultural practices, Insecta, India 5401.
plantations, damage, Isopora, India 6210.
thermoregulation, water relations, *Geocoris punctipes*, *Lygus hesperus* 5707.
water balance, *Hemilepistus apghanicus*, *Hemilepistus reaumuri* 2606.
- Ardeles silensis**,
new species, taxonomy, morphology, China, People's Rep. 4023
- Arilus cristatus**,
predators, feeding behavior, prey, *Rhinoecyllus conicus*, USA, Virginia 1200.
- Aristochia reticulata**,
host plants, herbivory susceptibility, vegetation patterns effects on, *Battus
philenor* 2072.
- Arizona**,
sympatric populations, interspecific hybridization, *Lygus elisus*, *Lygus
deserti* 3607.
- Armadillidium**,
iridovirus isolates, replication, *Lepidoptera* 5745.
- Armadillidium opacum**,
geographical distribution, Poland 788.
- Armadillidium pulchellum**,
geographical distribution, Poland 788.
- Armadillidium vulgare**,
breeding, life cycle, photoperiod effects on 6643.
- Armadillidium vulgare**, (continued)
hemolymph cells, parasites effects on, *Plagiobrychius cylindraceus* 1012.
hepatopancreas, diets effects on ultrastructure 6589
molting, embryogenesis, 20-hydroxyecdysone effects on 370.
reproduction cycles, regulation, photoperiod, temperature 7446.
saprohagy, biodegradation, assimilation 159.
- Armadillidium vulgare**,
polymorphism, coloration, population genetics 2342.
- Armitigeres**,
breeding sites, surveys, septic tanks, Malaysia 9261.
- Armitigeres subulatus**,
life history, reproductive behavior, longevity 462.
medical importance, parasites vectors, *Cardiophila*, *Dirofilaria immitis*,
Malaysia 6057
oviposition, diurnal variations 3525.
- Armillariella melica**,
host plants, developmental stages, *Oxyopus lateralis* 4931.
- Armitermes**,
defense secretions chemical composition, phylogeny 1566.
- Armoreum hoberlandti**,
new species, taxonomy, morphology, Zaire 4011.
- Arocephalus longiceps**,
species composition, species diversity, grasslands, Austria 6869.
- Aromatic compounds**,
amino acids, metabolism, cuticles, Insecta 171.
attractancy, pest control, *Maltus*, *Rhagoletis pomonella* 8500.
attractancy, traps, pest control, *Macroctactylus subspinosus* 8487.
- Arrenurus**,
mouth parts, ultrastructure, parasites 2505.
new species, taxonomy, morphology, India 2378.
parasites, feeding apparatus morphology, *Ischnura verticalis* 84.
parasites, feeding behavior, defense mechanisms, *Zygoptera* 6762.
parasites, infestation, effects on, *Zygoptera* 4381.
- Arrenurus bengalensis**,
new species, taxonomy, morphology, India 2378.
- Arrenurus crassicaudatus**,
feeding behavior, ecological distribution, Netherlands, Maarsveen I L. 5433.
- Arrenurus dorsatus**,
new species, taxonomy, morphology, India 2378.
- Arrenurus rhopalopoleiatus**,
new species, taxonomy, morphology, India 2378.
- Arrenurus valencius**,
life history, parasitology, Guatemala, Laguna Chichoj L. 503.
- Arrhenosphaera cranei**,
pathogens, reviews, *Apis mellifera* 8156.
- Artemisia absinthium**,
weed control, host plants, feeding, *Euzophera cinerosella* 7668.
- Artemisia californica**,
host plants, infestation, *Perarthrus vittatus*, USA, California, San Diego Co.
6810.
- Artemisia tridentata**,
antifeedants, chemical composition, predators, *Leptinotarsa decemlineata* 521.
- Arthritis**,
treatment, venom, *Apis mellifera* 2180.
- Arthromelus rossii**,
new species, morphology, Kenya 1605.
- Arthropoda**,
abundance, community composition, Glycine max crop fields 2164.
abundance, domestic animals excretory products, Uganda 2896.
abundance, forest floor litter, clear cutting effects on 2111.
abundance, herbicides effects on, nontarget organisms, soil 5259.
abundance, species diversity, leaf litter, diurnal variations, rainfall 2883.
activity, forests, pollution effects, aminoacarb, pesticide applications 9212.
allergic diseases, man 1374.
Anaplasma marginale transmission, blood meals, cattle 7628.
association, nutrient levels, *Drosophila erythrorhiza*, Australia 7555.
biochemistry, convergence evolution 259.
bites, stings, medical importance, man, USA, Georgia, Ft. Stewart 6886.
collections, directorates, federal policy, public lands, USA 4754.
community composition, abundance, grasslands management effects on 5234.
community composition, abundance, non-target organisms, insecticides effects on,
USA, California 2149.
community composition, environmental impact, power lines, chaparral, USA, Arizona
9183
community composition, nutrient content, forests, canopies, USA, North Carolina
2144.
community structure, succession, forests, USA, Arizona 6854.
cuticle lipids, function, chemical composition 883.
decomposition, nutrients, forest floor, litter 2114.
demography, sampling, carrion traps 1694
development rate, temperature effects on, life history 5833.
disease transmission, disease control, reviews 9246.
ecophysiology, developmental stages, deserts, temperature effects on oxygen
consumption 5710.
ectoparasites, birds, new records, USA, Alaska 520.
ectoparasites, surveys, *Pediocetes phasianellus*, Canada, Manitoba 1230.
embryology, development 3459.
endangered species, rare species, wildlife conservation 2147.
factors affecting abundance, species richness, pests, *Camellia sinensis* crop
fields 4574.
food organisms, *Selasporthus platycercus* 571
food preferences 1197.
forests, predators effects on, *Myrmotoma fulviventeris* 4467.
grasslands, sampling methodology 5617.
hedgehogs, species diversity, management effects on, British Isles 7618.
hematophagy, phagostimulants, reviews 492
hematophagy, sense organs, electrophysiological recording, methodology,
bibliographies 4758.
infection, diagnosis methodology, man 9222.
infestation, skin diseases, therapy, man 8412.
intestinal parasites, hosts, *Zenaidia macroura*, *Zenaidia asiatica*, USA, Florida
3582.
lectins, occurrence, reviews 180.
locomotion analysis, films 852.
medical importance, disease transmission, historical account 2929.
movements, interspecific relationships, encounters, mathematical models 6788.

Arthropoda, (continued)

- nontarget organisms, community composition, soil, insecticides effects on 5260
orchards, soil fauna, community composition, distribution 7008
orientation, locomotion 5862
parasites, abundance, Rodentia, Egypt, Arab Rep. 3588
parasites, cattle, surveys, Bulgaria 4497
parasites, check lists, Mammalia, New Zealand 1231
parasites, factors affecting distribution, Mammalia 3585
parasites, incidence, Antidorsas marsupialis, South Africa 9146
parasites, infestation, Peromyscus maniculatus 2831
parasites, new records, Thelastomidae, India, North 8390
pest control, repellents, clothing 8962
pesticide resistance, mechanisms, reviews 9284
pests, surveys, Vaccinium corymbosum, USA, Arkansas 4551
prairies, detritus processing, USA, Wisconsin 2287
predators, developmental stages, mortality, Musca vetustissima, Australia 2880
predators, population density, crop fields, USA, Virginia, Glycine max 6190
recolonization, community composition, reclaimed land, mines 6048
recolonization, community composition, salt marshes, USA, Florida Coast 5264
repellents, aerosols, efficacy 8965
sampling methodology, crop fields 5629
sampling methodology, crop fields, pest management 3237
soil, conferences 5541
soil fauna, community composition, Japan 8600
soil fauna, leaf litter decomposition, nutrient cycles, USA, Alaska 5989
systematics, information systems, data banks, computers 4759
taxonomy, classification, computer programs 1586
toxicity, Naja mossambica mossambica venom, enzymatic activity effects on 1057
venom, toxins, immune response, man, reviews 5764
- Artificial diets,**
DIMBOA, effects on development, mortality, reproduction, Ostrinia nubilalis 9306
host plants, development, fecundity, Spodoptera frugiperda 6169
mass rearing, Lygus hesperus 8016
rearing, development, Leucania separata 2493
rearing, larvae, Wyomyia smithii 5625
rearing, methodology, Hylomyscus bajulus 8014
rearing methodology, Sabulodes aegrotata 8019
rearing, proteins, Spirulina platensis, Bombyx mori 3239
rearing, Semidialia undecimnotata, Chrysopa carnea, Chrysopa perla, Chrysopa septempunctata, Chrysopa formosa 6474
seeds extracts, effects on metamorphosis, Azadirachta indica, Ceratitis capitata 9153
- Artificial insemination,**
semen, storage, freezing, nitrogen, viability, Apis mellifera 1877
- Artificial substrates,**
colonization, pollution effects, water pollution, Hygroplites fluviatilis 1939
nests, rearing methodology, Polistes 1852
oviposition, mass rearing, Pimpla instigator 2735
oviposition, parasites, Gonia cinerascens 2823
oviposition, rearing, Gonia cinerascens 6472
sampling, benthos, rivers, Hydropsyche, USA, Mississippi R. 6226
- Artocarpus heterophyllus,**
fruit rot, disease transmission, Insecta 2232
- Artyzona,**
defense secretions, chemical composition, New Zealand 1802
- Artyzona erichsoni,**
defense secretions, chemical composition, New Zealand 1802
- Artyzona obscura,**
defense secretions, chemical composition, New Zealand 1802
- Artyzona rugiceps,**
defense secretions, chemical composition, New Zealand 1802
- Aruna,**
infestation, Empoasca flavescens 2158
- Aryl carbamate,**
insecticides, pesticide resistance, inheritance, genetic factors, Metaseiusus occidentalis 8651
- Aryl carbamates,**
insecticides, pesticide resistance, genetics, biochemical characteristics, Metaseiusus occidentalis 4688
- Arylamidases,**
digestion, proteins, midgut, Rhynchocysta americana 6545
- Aryzema densa,**
rearing, life history, biological control, Eichhornia crassipes 3550
- As,**
new genera, taxonomy, morphology, Mascarenes 4813
- Asaphes lucena,**
hyperparasitism, venom, paralysis, larvae, Aphidius smithi 2820
- Asaphidion flavipes,**
new records, geographical distribution, habitat, USA, Connecticut 8696
- Asarum caudatum,**
pollination, reproduction, Diptera 6786
- Asciaphididae,**
taxonomy, morphology, keys 4057
taxonomy, morphology, keys, Brazil, Amazon Basin 4056
- Ascarops strongylina,**
parasites, Onthophagus gazella, USA, Georgia, USA, Texas 9203
- Asclepias syriaca,**
host plants, foraging behavior, Bombus 2050
- Ascia monuste,**
pests, economic importance, Venezuela 2777
- Ascia monuste orseis,**
mating behavior, environmental factors, temperature, copulation 5104
- Asclepias humistrata,**
cardenolide, effects on oviposition, larvae survival, Danaus plexippus, USA, Florida 9134
host plants, oviposition, survival, larvae, Danaus plexippus 5958
- Asclepias syriaca,**
food plants, abundance, geographical distribution, Danaus plexippus, USA, Wisconsin 7566
host plants, effects on predation, Misumenia vatia 457

Asclepias syriaca, (continued)

- pollination, outcrossing, interspecific relationships, Bombus 6780.
- Ascogaster quadridentatus,**
infection, overwintering larvae, Laspeyresia pomonella 9004
- Ascogaster reticulatus,**
host searching behavior, oviposition, kaaromones, eggs, Adoxophyes 7485
parasitoids, host searching behavior, oviposition, fecundity 7482
- Ascogregaria,**
parasites, new records, geographical distribution, Aedes polynesiensis, Tokelau Is. 9196
- Ascoleus turkarakandus,**
parasitoids, new species, taxonomy, morphology, Turkey 7988.
- Ascomycetales,**
association, Coleoptera, Tunisia 9152
- Ascophaera apis,**
apiculture, disinfection, methyl bromide 8527
pathogens, reviews, Apis mellifera 8156
- Ascophaera major,**
pathogens, reviews, Apis mellifera 8156
- Ascorbic acid,**
effects on pathogens growth, Nomuraea rileyi, Noctuidae 1812.
- Ascoschoengastia daurela,**
new species, taxonomy, morphology, parasites, USSR, Russia 7146.
- Ascoschoengastia rosetti,**
new species, Rhyssalus amplexicaudatus, Rallus torquatus, Philippines 794.
- Ascophaera aggregata,**
etiology, symptoms, infection, Megachile rotundata 5729
- Ascophaera apis,**
chalkbrood disease, occurrence, Apis mellifera, Japan 1816
pathogens, colonies, chalkbrood disease, Apis mellifera 1803
- Asenman leuconice,**
new records, geographical distribution, Sweden, Gotika Sandöen I. 4704.
- Asexual reproduction,**
parasites, adaptations, aquatic environment, Entomophthora coica, Entomophthora rhizospora, Insecta 1009
pathogens, aquatic organisms, Insecta 1809
- Asia,**
sedimentation, streams, bioaccumulation, Hesperoperla pacifica, Rhyacophila acropedes, Rhyacophila vao, Drunella dodds, Rhithrogena robusta 6236
- Asbes,**
volcanic environment, effects on insecticides degradation, chemical control, Laspeyresia pomonella, USA, Washington 3785
- Asia,**
geographical distribution, new records, Fensini 2447
new species, geographical distribution, Pteromalidae 35
new species, taxonomy, host preferences 783
new species, taxonomy, Jenkinshelea niphanea 3200
new species, taxonomy, morphology, Amblyseius chaghi 8725
occurrence, Corentarioneminae 1581
soil fauna, autecology, species composition, Curculionidae 8599
surveys, geographical distribution, Tenebrionidae 781
taxonomy, morphology, keys, Trypoxylon 4882
taxonomy, morphology, Lithobiidae 4069
taxonomy, morphology, new genera, new species, Staphylinidae 4812.
- Asia, Himalayan Mts.,**
47 new species, taxonomy, morphology, Malachiidae 7944.
new species, taxonomy, morphology, Pycna verna 4016.
- Asia, Himalayan,**
new species, taxonomy, morphology, Pycna verna 8814.
- Asia, Himalayan Mts.,**
taxonomy, morphology, keys, Lasius 5590
- Asiliidae,**
developmental stages, morphology, comparative studies 77
taxonomy, morphology, India 4001.
- Asilinae,**
developmental stages, morphology 77.
- Asiocortarionemus,**
morphology 1581
- Asiopocopus meridionalis,**
new species, taxonomy, morphology, Spain 8003
- Asobara tabida,**
parasitoids, host searching behavior, Drosophila melanogaster 7539
pathogens, immune response (cell-mediated), Drosophila melanogaster 1819.
- Asoleus lodoli,**
parasitoids, new species, taxonomy, morphology, Turkey 7989
- Asolcus plantiae,**
Synonymy, Trisolcus japonicus, Dissolcus Japonicus 4020.
- Asolcus semistriatus,**
new records, geographical distribution, Turkey 7989
- Asparagrus affinis,**
Fusarium infection, infestation effects on, Ophiomyia simplex, USA, Massachusetts 6134
- Aspercremaeus,**
new genera, taxonomy 7933
- Aspercremaeus longipilus,**
new species, taxonomy, morphology, USSR 7933
- Aspergillus flavus,**
biological control, mycotoxins, aflatoxins, bioaccumulation, Zea mays, Ostrinia nubilalis 4625
infection, interspecific relationships, Zea mays, Ostrinia nubilalis 9272.
interspecific relationships, Zea mays, Ostrinia nubilalis 6899
Zea mays, effects on mortality, Sitophilus zeamais 2039
- Aspergillus flavus,**
Zea mays, effects on mortality, Sitophilus zeamais 2039.
- Asphondylia belianthiobolus,**
galls, interspecific relationships, Rileyia americana, Torymus advenus, Torymus, USA, Pennsylvania 5182
galls, species composition, association, Rudbeckia laciniata 6020
- Asphyxia,**
tolerance, colonies, propolis effects on, Apis mellifica carnica 1413.
- Aspidiotaphagus,**
taxonomy, keys 2456
- Aspidiotas aeri,**
hosts, parasites host searching behavior, oviposition, Aphytis 7542.
- Assam local,**
infestation, Empoasca flavescens 2158

- Assays,**
efficiency, repellents, chemical control, *Rhipicephalus evertsi* evertsi 1369.
enzymes, immune serum, *Dendroctonus frontalis*, *Dendroctonus terebrans*, *Ips avulsus*, *Ips calligraphus*, *Ips grandicollis* 1769.
hormones, ecdysone synthesis, neurosecretion cells, *Manduca sexta* 3343.
oviposition attractants efficacy, *Aedes triseriatus* 1897.
sex pheromone, methodology, *Tnchoplusia ni* 4913.
standardization, pathogenicity, larvae, *Bacillus thuringiensis*, *Culicidae* 8995.
vitellogenin mRNA, fat body, *Locusta migratoria* 6569.
- Assemblages,**
soil, *Cicadellidae*, USA, Pennsylvania 5229.
- Assimilation,**
biodegradation, saphrophy, *Armadillidium vulgare* 159.
energy budget, developmental stages, *Oryzaephilus surinamensis* 173.
food consumption, energy utilization, *Chrysogonus trachipterus* 8929.
host plants developmental stages, host-parasite interactions, *Pryena sinica*, Japan 981.
radioscopes, chromium, strontium, symbionts effects on, *Gromphadorhina portentosa*, *Gromphadorhina schaeferi* 8108.
- Association analysis,**
plants, community composition, Insecta, *Xanthocephalus sarthrae*, *Xanthocephalus microcephala* 2064.
- Associations,**
larvae, food plants, cocoons, *Callosama promethea*, USA, Michigan 2070.
- Associative learning,**
mutation, habituation, sensitivity, *Drosophila* 8647.
- Astenus jordanicus,**
new species, Jordan 3187.
- Asteraceae,**
polyacetylenes, toxicity, chemical control, *Aedes aegypti* 317.
- Asteromyia carbonifera,**
symbiosis, oviposition inhibition, parasitoids, *Sclerotium asteris*, *Torymus capitatus* 8309.
- Asthma,**
man, immunotherapy, *Dermatophagoides farinae* 2174.
- Asigmata,**
evolution, ecological evaluation, association, symbiosis, reviews 6295.
new species, *Teinocoptes palangensis*, *Teinocoptes eucyrtis*, *Teinocoptes brevis*, Malaysia, India 8726.
- Asigmatidae,**
enzymatic activity, lysozyme 1764.
- Astochia bengalensis,**
new species, taxonomy, morphology, India 7184.
- Astochia gupta,**
new species, taxonomy, morphology, India 7184.
- Astochia jayarami,**
new species, taxonomy, morphology, India 7184.
- Astochia thirani,**
new species, taxonomy, morphology, India 7184.
- Astronoides,**
new genera, morphology, taxonomy 2469.
- Asymbius indicus,**
new species, taxonomy, morphology, India 7169.
- Asymbius alensis,**
new species, taxonomy, morphology, China, People's Rep. 7169.
- Ataenius spretulus,**
life history, oviposition, development, phenology, flowering, *Spiraea vanhouttei*, *Aesculus hippocastanum*, *Rubia pseudowiczii*, *Hibiscus syriacus*, soil temperature 1867.
- Atalaphioides,**
drift, environmental effects, Australia, A.C.T., Condor Creek 753.
nymphs, drift activity, drift, Australia 754.
- Atetemes,**
surveys, geographical distribution, Mongolia, People's Rep. 3934.
- Ateuchotermes muricatus,**
agonistic behavior, defense mechanisms, social behavior 6219.
- Ateuchotermes rastratus,**
agonistic behavior, defense mechanisms, social behavior 6219.
- Athalia proxima,**
developmental stages, lipid composition 3323.
pest control, insecticides, crop fields 7743.
- Atherigona,**
host plants, pest resistance, heritability 4566.
new species, taxonomy, morphology, Africa 5567.
new species, 12 species, morphology, taxonomy, India 822.
pest resistance, gemplasm, *Zea mays* 7688.
pests, chemical control, seeds viability, *Sorghum vulgare* 7782.
pests, life history, control programs, research programs, Sudan 4562.
pests, sampling, attractants 4077.
population dynamics, seasonal variations, host plants, Upper Volta 4431.
trifoliolate organ, ultrastructure, taxonomy 4105.
- Atherigona conigera,**
trifoliolate organ, ultrastructure, taxonomy 4105.
- Atherigona hancocci,**
trifoliolate organ, ultrastructure, taxonomy 4105.
- Atherigona laegata,**
trifoliolate organ, ultrastructure, role 4105.
- Atherigona saccata,**
chemical control, pest control 4569.
chemical control, toxicity, carbofuran 3003.
diet variations, oviposition, hatching, eggs, adult eclosion 4983.
enzymes, digestive tract, larvae 4153.
fecundity, fertility, diets 4434.
fecundity, reproductive behavior, oviposition, host plants 5842.
feeding behavior, growth, orientation, host plants, *Atherigona saccata* 4563.
host plants, pest resistance, antibiotics, *Sorghum vulgare* 7751.
insecticides, isofenphos, merphosfolan, systemics, efficacy 7777.
larvae, development, food organisms effects on, *Sorghum* 358.
life history, population dynamics, pest control, Thailand 4568.
mortality, fecundity, cultivars pest resistance, *Sorghum* 4565.
oviposition deterrents, pheromones, population density 1908.
oviposition, eggs distribution, host plants, *Sorghum bicolor* 4288.
oviposition, substrate preferences, host plants, *Sorghum vulgare* 7483.
oviposition, survival, host plants population density effects on, *Sorghum* 6104.
pest control, chemical control, carbofuran 5358.
- Atherigona saccata, (continued)**
pest control, control programs, research programs, *Sorghum* 4556.
pest control, insecticides, efficacy 5396.
pest control, integrated control 4570.
pest resistance, biochemistry, *Sorghum bicolor* 4564.
pest resistance, host plants, biochemical characteristics, *Sorghum bicolor* 7740.
pests, abundance, seasonal variations, *Sorghum*, Nigeria 4560.
pests, incidence, *Sorghum*, China, People's Rep. 4559.
pests, life history, control programs, research programs, Sudan 4562.
pests, sampling, attractants 4077.
physiology, biology, control programs, conferences 4496.
population dynamics, environmental conditions, *Sorghum arundinaceum* host plants, Kenya 4432.
population dynamics, seasonal variations, host plants, Upper Volta 4431.
sensilla, morphology 4131.
trifoliolate organ, ultrastructure, taxonomy 4105.
- Atherigona varia saccata,**
host plants, pest resistance, seedlings, morphology role, *Sorghum bicolor* 7719.
- Atheta cellaria,**
new records, geographical distribution, Switzerland 7099.
- Atheta coriaria,**
predator-prey interactions, population dynamics, mathematical models, *Stelidota germinata* 9204.
- Atheta chastrostomi,**
new species, taxonomy, morphology, Sweden 4777.
- Atheta leonhardi,**
association, *Proteinus longicornis*, Switzerland 7621.
- Atheta mariei,**
synonymy, *Atheta strinati*, Switzerland 7621.
- Atheta parens,**
new records, geographical distribution, German Dem. Rep., Potsdam, Rietzer See 4711.
- Atheta strinati,**
synonymy, *Atheta mariei*, Switzerland 7621.
- Atheta taxicoides,**
new records, geographical distribution, habitat, British Isles, Berkshire 6313.
- Atholus khnzoriani,**
new species, taxonomy, morphology, USSR, Armenia 8766.
- Atlantic Ocean,**
new species, taxonomy, morphology, *Halacarus* 6343.
- Atlanticus pachymerus,**
karyotypes, evolution, phylogeny 1567.
- Atlantitermes,**
new genera, taxonomy, morphology, Brazil 8836.
- Atlantitermes guarani,**
new species, taxonomy, morphology, Brazil 8836.
- Atlantitermes ibitiaguara,**
new species, taxonomy, morphology, Brazil 8836.
- Atmospheric conditions,**
convergence zones, night flight activity aggregation, Insecta 7573.
dispersal, pest control, *Choristoneura fumiferana*, Canada, New Brunswick 705.
effect on phosphine toxicity, Insecta 1050.
effects on stored products pests, *Acarina* 1395.
gases, effects on activity patterns, *Ornithonyssus* 1937.
nitrogen, carbon dioxide, effects on feeding, *Amyelois transitella*, *Plodia interpunctella* 8278.
- Atosmia rubida,**
olfactory stimuli, flight activity, orientation, chemoreception, Insecta 5130.
- Atopica rubida,**
geographical distribution, new records, Sweden 3943.
- Atopic dermatitis,**
hypersensitivity, man, *Dermatophagoides farinae* antigens 8405.
- ATP,**
chemical stimuli, blood meals, *Rhodnius prolixus* 5930.
levels, salivary gland, histology, mitochondria, *Chironomus tentans* 4952.
- ATP pyrophosphatase,**
activity, inhibitors effects on, malpighian tubules, *Locusta migratoria* 2572.
enzymatic activity, flight muscle mitochondria, *Musca domestica* 945.
enzymatic activity, mitochondria, muscles, energy resources, *Musca domestica* 950.
role, coloration, pigments migrations, *Carausius morosus* 3363.
- Atracvis menestries,**
diapause eggs, biochemical analysis, carbohydrates, metabolism 1098.
- Atractomorpha,**
taxonomy, new species, identification keys, China, People's Rep. 2475.
- Atractomorpha crenulata,**
damage, crop fields, *Helianthus annuus* 5328.
- Atrax,**
venom, toxicity, bioassays 1052.
- Atriplex,**
host plants, galls, new species, *Tetrastichus cecidobroter*, USA, California 7963.
- Atriplex canescens,**
host plants, pest outbreaks, *Triepida nova*, USA, Arizona 6795.
- Atropis,**
gonads, hybrids, sterility, *Drosophila simulans* 5067.
- Atrytonopsis,**
synonymy, taxonomic revision, *Lynchuoides frappenda*, Mexico 7994.
- Atta,**
swarming behavior, aggression, pheromones, workers 4651.
vitellogenesis, ultrastructure, histochemistry 5066.
- Atta cephalotes,**
infestation, epizootics, *Camponotus*, Brazil, Amazonas 5023.
- Atta cephalotes itimbicola,**
sterols, brain, body, biochemical analysis, identification 5690.
- Atta columbica,**
feeding behavior, food plants, water content, food preferences 2005.
- Atta insularis,**
foraging behavior, circadian rhythms, seasonal variations 6737.
- Atta laevigata,**
DNA content, mating behavior correlation 1137.
oxygen consumption, temperature effects, workers 4174.
- Atta sedens,**
comparison, chemical control, Dufour's Gland, defense secretions 254.
- Atta sexdens rubropilosa,**
oxygen consumption, temperature effects, workers 4174.
- Atta texana,**
queens, nests, USA, Louisiana 3046.

- Attachment**,
larvae, hosts, blood meals, cattle, *Amblyomma americanum* 8339.
sites, preferences, parasites, *Leptus* 8321.
- Attack**,
aggressive behavior, *Formica lugubris*, *Formica cunicularia* 3849
defensive behavior, alarm behavior, *Polybia occidentalis* 2795
host plants, new records, pests, *Schizotetranychus*, *Crotalaria spectabilis* 7675
predatory behavior, *Serrastroma serula* 6741.
Uromycladium trepanum galls, species composition, *Acacia* host plants.
Lepidoptera 7557.
weeds, developmental stages, *Emex australis*, *Peripion antiquum* 5205.
- Attacus atlas**,
pupae, new records, predation, *Sciurus carolinensis*, USA, Wisconsin 5265.
- Attacus ricini**,
RNA genes, DNA restriction endonuclease mapping, hybridization analysis 9393.
- Attagenus megatoma**,
diapause, morphogenesis, temperature effects on 5817
digestive enzymes, carboxypeptidase, characterization 1765.
larvae, chemical properties, specificity, aminopeptidase 187.
larvae, enzymes, biochemical characteristics, cleavage 957.
pest control, feeding, clothing, perennials 3796.
proteinase, characterization, isoelectric focusing 5692.
- Attraction**,
aggregation pheromone, chemical composition, *Tribolium castaneum*, *Tribolium confusum* 2591.
allyl methylcyclohexanecarboxylate isomers, pest control, *Blattella germanica* 3831.
aniso acid, *Culex pipiens molestus*, *Aedes aegypti* 8966.
aromatic compounds, pest control, *Malus*, *Rhagoletis pomonella* 8500.
aromatic compounds, traps, pest control, *Macrodactylus subspinosus* 8487.
bait, seasonal variations, copulation, *Shirahoshizo pini*, *Shirahoshizo rufescens*.
Shirahoshizo insidiosus, Japan 2901
baits, disparture, analogs, *Portheria monacha* 6930
baits, growth regulators, pest control, *Camponotus pennsylvanicus* 8969
baits, trapping, *Hydomyza nitida*, *Hydomyza platira* 3580.
carrion, abundance, species composition, *Silphidae* 5928.
chemical composition, sex pheromone, *Platypeltia carduiactyla* 1788.
chemical stimuli, electroantennograms, *Diaprepes abbreviatus* 5669.
components, sex pheromone, chemical composition, *Spodoptera littoralis* 6575.
dipropyl disulfide, oviposition, EAG responses, chemoreception, *Hydomyza nitida* 3538.
feces, *Riftia*, *Amphibia*, *Scarabaeidae*, Panama 5134.
females, age, mating behavior, males, *Tenebrio molitor* 7488
females, sex pheromone, *Lygocoris compositus* 8098.
food attractants, comparative studies, *Hydomyza* 485.
host plants, γ radiation effects on, *Scolytus multistriatus* 8968
host plants, pollination, *Helianthus annuus*, *Insecta* 7762.
interspecific relationships, *Schinia mitis*, *Spodoptera eridania* 5120.
lures, ammonia, Tephritidae, Australia 3741.
lures, *Phorox*, pheromone traps, efficacy, *Scolytidae* 3803.
methylcyclohexanol, *Blattella germanica* 2593.
Nasonov gland pheromones, workers, *Apis mellifera* 5115.
olfactory stimuli, plant extracts, *Avena*, aggregation, *Oryzaephilus surinamensis* 6700.
organic compounds, sex pheromone, males, *Lepidoptera* 2592
pheromone traps, males, *Dacus oleae* 3006
pheromone traps, pests, *Sesuidae*, USA, Mississippi 3786.
pheromone traps, population levels, *Homoeosoma electellum* 5702
pheromone traps, population studies, *Trypandromorpha lineatus* 5704.
pheromones, conspecifics, *Aponoma hydrosauri* 7332
pheromones enantiomers, *Dendroctonus frontalis* 4313
pheromones, sterilized organisms, *Lymantria dispar* 5872
pollen, foraging behavior, *Apis mellifera* 8302
pollination, *Glycine* max, *Apis mellifera* 5972.
precoene II topical application effects on, pest control, *Ceratitis capitata* 8099.
prey, webs, structure, design, *Phoronida* studo 2790
propyl cyclohexanecarboxylate, deuteration, *Blattella germanica* 3734
queens sex pheromone, extracts, workers, *Apis mellifera* *lignistica* 8272
sex pheromone, chemical communication, *Zygaena* 5116
sex pheromone, chemical composition, (E)-10-hexadecenal, males, *Dichocrocus punctiferus* 7341
sex pheromone, chemical composition, *Quadrastipidium perniciosus* 1783.
sex pheromone components, *Heliothis subflexa* 2585
sex pheromone components, *Heliothis zea* 3540
sex pheromone, crowding, males, *Acanthoscelides obtectus* 5091
sex pheromone, *Cryptophlebia leucotea* 2599
sex pheromone, disruption, synthetic components, *Chorostoneura fumiferana* 2756
sex pheromone, groups effects on, *Acanthoscelides obtectus* 3544
sex pheromone, habituation, *Trichoplusia* n. 2763
sex pheromone, interspecific relationships, *Pyralis farinalis*, *Ameylois transiella* 5839
sex pheromone, interspecific relationships, *Pyralis farinalis*, *Ameylois transiella* 9076
sex pheromone isomers, *Neodiprion lecontei* 3538
sex pheromone, odors, chemosterilants, *Glossina morsitans morsitans*, *Glossina pallidipes* 6084
sex pheromone, olfactory communication, *Heliothis punctigera* 5871
sex pheromone, periplanone-B, pheromone traps, *Periplaneta americana* 5007
sex pheromone, pest control, *Phthorimaea operculella* 6140
sex pheromone, pest control, *Sitophilus oryzae* 7333
sex pheromone, role, mating behavior, *Rhagoletis cerasi* 8960
sex pheromone, sexual behavior 4306.
sex pheromone, *Xylomyges canalis* 5703
synthetic pheromones, catching methods, apiculture, *Apis mellifera* 5292
synthetic sex pheromone isomers, *Agrostis segetum* 3356
synthetic sex pheromone, *Noctuidae* 7335
synthetic sex pheromone, *Synanthedon pictus* 7338
(+)-trans-verbenyl acetate, sex pheromone mimics, *Periplaneta americana* 4311
yeasts, developmental stages, feeding behavior, niche pattern, *Drosophila buzzatii*, *Drosophila aldrichi* 3303
yeasts, genetic variance, feeding behavior, niche pattern, *Drosophila buzzatii*, *Drosophila aldrichi* 3268.
- Attraction**,
bait, infection, wood, *Gloeophyllum trabeum*, *Isopetra*, attractants 3250
bioassays, cuticle hydrocarbons, *Musca autumnalis* 1780
caryophyllene, males, *Collops vittatus* 418.
- Attractants, (continued)**
chemical analysis, proteins, *Dacus tryoni* 3757.
chemical composition, males, *Pseudaletia unipuncta* 219.
chemical composition, sex pheromone, males, *Euxoa auxiliaris* 698.
chemical perception, effects on foraging behavior, pollinators, *Apis mellifera* 4577.
chemotaxis, *Allium cepa*, microorganisms, volatiles, synergism, *Hydomyza nitida*, *Fannia canicularis* 230.
color, traps, *Sappya pumila*, *Megachile roundata* 718
diets, *Bos taurus*, effects on, catchability, *Glossina morsitans*, *Glossina pallidipes*, Zimbabwe 1173
efficacy, biological control, *Scolytus scolytus*, *Scolytus multistriatus* 1464.
efficacy, comparative studies, *Hydomyza nitida* 515.
efficacy, comparative studies, *Musca domestica* 743.
efficacy, *Euxoa tessellata* 3583
efficacy, pest control, *Melissopus laevis* 740
efficacy, pest control, *Pectanopora gossypiella* 1476
efficacy, traps, *Glossina morsitans morsitans*, *Glossina pallidipes*, Zimbabwe 3670
efficiency, pest control, poultry farms, *Diptera* 4639.
females extracts, lipids, *Lucilia cuprina* 215
field trials, chemical stimuli, visual stimuli, pest control, *Rhagoletis pomonella* 4583
food, attractancy, sex differences, comparative studies, *Hydomyza* 485.
food organisms, effects on reproductive behavior, *Sinagra cerealella* 424
host plants, biochemical analysis, *Allium porum*, *Acrotopis assectella* 1240
host plants, host searching behavior, *Cavariella agropodi* 2056.
host plants, oviposition, *Papilio* 3594
hosts, visual stimuli, visual evoked response, *Mansonia*, *Anopheles ziemanni* 1919.
identification, aggregation behavior, pest control, *Monochamus alternans* 1928.
oviposition, efficacy, assays, *Aedes triseriatus* 1897
oviposition, traps, *Ameylois transiella* 6170
(E)-9-oxo-2-decenic acid, pheromones, *Apis mellifera* 8533
pest control, control programs, suppression, populations, *Cochliomyia hominivorax* 8560
pest control, persistence, dose, *Cydia nigricana* 696.
pheromone traps, biological control, *Ips typographus* 706
pheromone traps, efficacy, *Synanthedon pictus* 2230
pheromone traps, electroantennograms, *Tebana bonifatiella* 5701.
pheromone traps, population studies, *Cydia nigricana* 2492
pheromones, catching methods, traps, design, *Anthonomus grandis* 702
pollination, *Malus domestica*, *Apis mellifera* 5411
population levels monitoring, *Cydia nigricana* 3022
response, males, *Dacnusa*, Australia 3030.
sampling, pests, *Atherigona*, *Atherigona soccata* 4077.
sex pheromone, bait, traps, *Diercya discolor*, USA, South Carolina 425
sex pheromone, efficacy, comparison, *Synanthedon exitiosa*, *Synanthedon pictus* 2231
sex pheromone, males, *Lepidoptera* 2592
sex pheromone, olfactory stimuli, electroantennograms, *Anthonomus grandis* 5006
sex pheromone, pest control, *Platypeltia carduiactyla* 2187
sex pheromone, pest control, suppression, mating, *Eucosma sonomana* 4585.
sex pheromone, pheromone traps, *Agrostis segetum*, Japan 2237
sex pheromone, pheromone traps, catches, variations, *Scotogramma trifolii*, Canada, Manitoba 4337
sex pheromone, *Spercha tractata* 1933
sex pheromone, trapping, *Papilio japonica* 4632
sex pheromone, *Trichoplusia* n. pheromone traps, *Scutis orbicularis* 1787
synthetic sex pheromone efficacy, *Spodoptera exigua*, *Homoeosoma electellum* 2201.
synthetic sex pheromone, isomers attractancy, *Agrostis segetum* 3356
synthetic sex pheromone, trapping, pests, *Homona magnanima*, Japan 5336
synthetic sex pheromone, traps, *Papilio japonica* 1930
trapping, crop fields, *Delia radicum* 3752
trapping, *Protagorus obscura* 6144
traps, abundance, activity patterns, agricultural ecosystems, *Labidura riparia* 3163
traps, efficacy, *Delia brassicae* 6188.
traps, species composition sampling, *Neuroptera* 1686
volatiles, *Hibiscus esculentus*, *Gossypium*, parasites, *Eucelatoria* 4321.
- Attraction**,
host plants, species composition, *Arctidae*, *Ctenuchidae*, *Donnidae*,
Heliopterus, Kenya 3962
pheromones, interspecific relationships, *Dendroctonus brevicornis*, *Ips parvicornis* 1929
prey, burrowing behavior, *Cicindela willistoni*, USA, Arizona, Sulphur Springs Valley 5888
sex pheromone, orientation, males, *Periplaneta americana* 4302.
traps, modification, *Glossinidae* 4074
wood, vectors, *Scolytus multistriatus*, *Ulmus procera* 2062.
- Auberterius**,
new genus 4029
- Auchenorrhyncha**,
abundance, grasslands management effects on 5245
- Auchenorrhyncha**,
abundance, sex ratio, Egypt 6950
check lists, species composition, Belgium 9482
geographical distribution, Turkey 4735
niches, species composition, species diversity, association, grasslands, German Dem. Rep., *Leuca* Valley 7584
records, species composition, zoogeography, Norway 7898.
species composition, species diversity, grasslands, Austria 8669
auditory communication,
calling behavior, *Gryllidae* 4309.
drumming, geographical variations, *Pteronarcissa badia* 8269.
drumming, *Plecoptera* 8268
reproductive isolation, song, geographical variations, *Mutelliana* 8266.
social environment effects on, *Palmaria* *nana* 9077.
song, *Cicadetta sinuipennis* 2759.
song, *Nezara viridula* 5271.
sound production (biological), diurnal variations, tropical environment, *Cicadidae* 5117
sound production (biological), *Glossina* 2757
sound production (biological), males, *Zonocerus variegatus* 2615.
sound production, *Gromphadorhina chopardi* 8270.
sound production variability, *Drosophila nasuta* 1164.
stridulation, energy metabolism, oxygen consumption, *Anurogryllus arboreus*,

Auditory communication, (continued)

- Oecanthus celerinictus, Oecanthus quadripunctatus 5021.
stridulation, Xanthippus corallipes 262
- Auditory perception,**
acoustic responses evolution, predators echolocation, Chiroptera, Lepidoptera 5158
auditory stimuli, mating behavior, courtship, Drosophila mercatorum 5852
ear, mechanical properties, tympanum, acoustic trachea, Tettigoniidae, Gryllidae 4977
ear, mechanical properties, tympanum, Noctuidae, Acrididae 4976
hearing, sense organs, Cystoma saundersi 139
neurophysiology, neurophysiology, Gryllus bimaculatus 4960
neurons, neurophysiology, tympanum, larvae, Locusta migratoria 4970
neurophysiology, Locusta migratoria 5663
neurophysiology, Locusta migratoria, Decticus vociferous, Tettigonia cantans 7293
receptors, neurophysiology, electrical properties, Corixa punctata 4134
sense organs, functional morphology, Tettigoniidae 3295
tympanum, acoustic responses, echolocation, predators, Chiroptera, Lepidoptera 4975
- Auditory stimuli,**
auditory perception, mating behavior, courtship, Drosophila mercatorum 5852
orientation, Gryllus bimaculatus 5863
role, mating behavior, deserts, Drosophila 2737
- Angiochiera,**
Dufour's gland, secretion, chemical analysis 988
- Angiochlorelia,**
Dufour's gland, secretion, chemical analysis 988
- Angiochloropsis,**
Dufour's gland, secretion, chemical analysis 988
- Antilocapra atripennis,**
food preferences, food plants, effects on development, fecundity, Cucurbitaceae 9167
- Antilocapra foveicollis,**
food preferences, food plants, effects on development, fecundity, Cucurbitaceae 9167
host preferences, life cycle 9106
- Anticorithus solani,**
disease transmission, potato spindle tuber viroid 3704
host preferences, food plants, Leguminosae 6945
pests, natural enemies, predators, crops, Beta vulgaris, New Zealand 8492
vectors, yellows, Beta vulgaris, Tasmania 6097
- Australasian Region,**
morphology, genitalia, Stenochilus, Colopoa 8052
new species, taxonomy, morphology, Gonolabis bidens, Gonolabis gilesi, Gonolabis dentata 7959
new species, taxonomy, morphology, Johnstonimyia bezzi, Johnstonimyia gressitti 4841
new species, taxonomy, morphology, Tharra laeocellata, Tharra ciliata, Tharra angusta, Tharra hamneri, Tharra epidemia, Tharra hamata, Tharra trispinata 8807
- Australia,**
abundance, seasonal variations, Dacus opitiae, Dacus tenuifascia 3636
aggregation, phenology, reproduction, Euploea core corinna 7581
allozymes variation, population structure, genetic relationship, Nothomyrmecia macrops 3123
apiculture, environmental factors 2214
arboviruses transmission, Culex annulirostris 3698
association, nutrient levels, trophic relationships, Arthropoda, Drosera erythrorhiza 7555
attractancy, lures, ammonia, Tephritidae 3741
attractants, response, males, Dacinae 3030
biogeography, streams, rivers, Insecta 3952
biological control, agricultural practices, grazing defoliation, Inopos rubriceps 729
biological control, interspecific relationships, survival, Musca vetustissima, Onitis alexis, Onthophagus binodis, Onthophagus ferox 1308
check lists, species composition, zoogeography, Drosophilidae 8705
colonization, littoral zone, water reservoirs, Formicidae 9174
compound eyes, receptors, Myrmica gulosa 137
developmental stages, mortality, predators, Musca vetustissima, Arthropoda 2880
disease transmission, plant viruses, Aphididae 3837
distribution, soil, leaf litter, forests, Cryptostigmata, Mesostigmata 4472
Dufour's gland, defense secretions, chemical composition, volatiles, Rhytidoponera metallica 246
environmental surveys, collections, Invertebrata 8704
foliage damage, herbivory, foliage, Insecta 2045
forests, abundance, leaf litter, abundance, environmental factors, Cryptostigmata, Mesostigmata 2881
genetics, wings, variations, clines, Heteromyrmecia merope merope 3925
geographical distribution, taxonomic revision, Cartomothus 4064
goats, ear ectoparasites, Raiilietia manfredi, Psoroptes cuniculi 650
habitat utilization, diets, host plants, Scymnoides lividigaster, Leptothoe galbula 6049
keys, morphology, collections, Coleoptera 4945
life cycle, host plants, mortality, Phylionorycter messaniella 3554
life history, ecological distribution, Scymnoides lividigaster, Leptothoe galbula 2874
livestock, infestation, disease transmission, pest control, Boophilus microplus 2934
livestock, parasites, pest control, Dalmalinia ovis, Linognathus pedalis, Linognathus ovillus 3746
morphology, biometrics, geographical variations, Diphebia 8044
morphology, ecology, host plants phenology, Opilia amentacea, Dacus opitiae 3626
morphology, immature stages, Parasarcophaga crassipalpis, Parasarcophaga omega, Tricholoprocopia beta, Tricholoprocopia impatiens, Tricholoprocopia tryoni, Taylorimyia iota, Boettcheria peregrina 2504
morphology, new species, Goniozus collessi, Goniozus mandibulatus, Goniozus jacintae 833
morphology, taxonomy, new species, Hastella 2473
nests, prey, behavior, Pison 1957
new records, geographical distribution, morphology, taxonomic revision, new genera, Tricholeichon, Hydrotipidae 8703
new records, geographical distribution, Musca casarea 5538
new records, parasitism, Heterohabditis, Graphognathus leucomela 2902
new species, morphology, geographical distribution, ecological distribution,

Australia, (continued)

- Dacus opitiae 821
new species, new genera, geographical distribution, morphology, Poccilococcus longilobus 827
new species, new genera, morphology, geographical distribution, Austropamphants woodwardi, Woodwardodignus gracilis 825
new species, new genera, taxonomy, morphology, Hughlechia giuliani 4779
new species, new genera, taxonomy, morphology, Plecoptera 4907
new species, new records, parasites, Tytocestus 1589
new species, taxonomy, morphology, Austrocestus monteithi 826
new species, taxonomy, morphology, phylogeny, Tamborinea commoni 2412
new species, taxonomy, morphology, Pison areniferum, Pison ciliatum, Pison barbaui 2448
nymphs, nocturnal activity, Atalophlebiodes 754
occurrence, Coreitarseneminae 1581
oviposition, substrate specificity, environmental effects, host plants, Stricidae 1896
parasites, geographical distribution, Amblyomma, Aponomma, Reptilia 3584
parasites, new species, Termitina, Isoptera 9005
pest control, heat tolerance, mortality, Rhizophthera dominica, Sitophilus oryzae, grasses 975
pest control, pesticide resistance, Haematobia irritans exigua 3430
pesticide resistance, surveys, Boophilus microplus 3448
population genetics, chromosomes inversions, clines, Drosophila melanogaster 1113
population genetics, sympatric populations, speciation, Anopheles farauti 1556
population studies, hypersensitivity, Apidae venom, man 9266
records, geographical distribution, identification keys, Trypoxylon 1582
seasonal variations, fat metabolism, body weight, dormancy, Scymnoides lividigaster, Leptothoe galbula 3327
sex ratio, population structure, Scymnoides lividigaster, Leptothoe galbula 2863
surveys, parasites, Heterodoxus, Petrogale 2921
sympatric populations, niche pattern, speciation, food sources, Drosophila 5496
sympatric populations, resource utilization, feeding, Drosophila megagerys, Drosophila notha 3590
taxonomic revision, keys, species, Phaenognatha 2402
taxonomic revision, morphology, ecological distribution, association, Drepanotermes 836
taxonomic revision, new genera, Hylaues, Laccobylaues, Planihylaues 4749
taxonomic revision, new species, new genera, 16 species, Cleraditi 3210
taxonomic revision, new species, Nymphidae, Nymphes, Myrmica 3227
taxonomy, morphology, Diplurinae 2389
taxonomy, morphology, geographical distribution, keys, Anthomyiidae 5574
taxonomy, morphology, geographical distribution, Tartessinae 7884
taxonomy, morphology, keys, Calamagrus 4903
taxonomy, morphology, keys, Trypoxylon 4882
taxonomy, morphology, new species, Amblyseius nambourensis, Amblyseius fletcheri 799
taxonomy, morphology, new species, Gryptopterygidae 5609
taxonomy, morphology, new taxa, Cincidellidae 4804
taxonomy, phylogeny, Ambrosiinae 8819
trail following behavior, diel periodicity, temperature effects, Iridomyrmex purpureus 3546
trapping, population density, estimation, dispersal, sex differences, Musca vetustissima 1311
weed control, biological control, feeding behavior, Longitarsus alabineus, Heliothrips curvipes 2950
weed control, biological control, introduced species, Perapion antiquum, Emex australis 6078
- Australia, A.C.T., Condon Creek,**
benthos, drift, composition, environmental effects 753
- Australia, Baas Strait,**
migrations, flight activity, radar, Persectania ewingii, Heliothis punctiger, Agrotis munda 1264
- Australia, Melbourne,**
population genetics, reproductive isolation, Drosophila immigrans 5490
- Australia, New South Wales,**
environmental factors, catchability, trapping, light traps, Heliothis armiger, Heliothis punctiger 1472
food plants, Acacia ingranii, larvae, Jalmenus evagoras 2093
geographical distribution, Diamesa oculans 9502
new species, morphology (organisms), taxonomy, Edwardsia confusa 3193
parasites infestation, Ixodidae, Acari, Trichosorus caninus 6776
pest control, damage, Heliothis, Gossypium 2988
spatial distribution, larvae, Basidiomycetes cultivation, Lycoriella agarici 2966
- Australia, New South Wales, Urama,**
wildlife management, pest control, myxomatosis vectors, Spiolapillus cuniculi, Oryctolagus cuniculus 7627
- Australia, North Queensland,**
geographical distribution, new records, Apatinura erminea 2375
- Australia, Northern Territory,**
blood meals, hosts, Mammalia, Culicidae, Chironomidae 3678
new species, taxonomy, morphology, Anisops ayei 5580
taxonomy, new records, Hemiptera 3208
- Australia, Northern Territory, Magela Creek,**
longevity, life history, freshwater environment, Tasmanocoenis, Cloeon fluviatile 4657
- Australia, Ord R.,**
surveys, geographical distribution, disease reservoirs, Culicidae 671
- Australia, Queensland,**
mating behavior, courtship, webs, Portia fimbriata 4287
parasites, incidence, Phthorimaea operculella 2828
population structure, geographical distribution, Odonata 4457
predatory behavior, webs, Portia fimbriata 4343
- Australia, Queensland, North,**
sexual dimorphism, sex differences, Latrodectus 2140
- Australia, South Australia,**
new species, taxonomy, morphology, Cryptocryptes minchami 2673
pest control, biological control, parasites, Trioxys complanatus, Theriaphis trifolii 3821
- Australia, Southwest,**
species composition, taxonomy, morphology, Trichoptera 7244
- Australia, Tasmania,**
new species, taxonomy, morphology, Austrocellula columbae 2476

- Australia, Torres Strait**, species composition, geographical distribution, Drosophilidae 3953
- Australia, Victoria**, infectivity, barley yellow leaf virus, seasonal variations, Rhopalosiphum padi, Rhopalosiphum maidis, Macrosiphum muscandi avenae 2618
- new species**, taxonomy, morphology, Carabhydus andreas 2405
- pathogens**, surveys, Telegryllus commodus 1003
- Australia, Western Australia**, new species, morphology, Chudalupia meridionalis 2379
- parapatric populations**, geographical distribution, surveys, Aponomma hydrosauri, Amblyomma albolineatum 5218
- Austriaphlebotomus**, keys, taxonomy 3195
- Austria**, life cycle, phenology, Pterostichus panzeri 6706
- life cycle**, reproduction, Gerns 7809
- photoperiods**, environmental effects, phenology, emergence, Tricoptera 3864
- surveys**, entomofauna, species composition, species diversity, grasslands 6869
- surveys**, records, geographical distribution, Gasteruptionidae 4733
- Austria, Alps**, alpine environments, freezing, cold tolerance, Oribatei 3553
- Austria, Carinthia Mus.**, new species, taxonomy, morphology, Drusus noricus 3235
- Austria, Innsbruck**, species composition, seasonal variations, Halcitinae 6817
- Austria, North Tyrol**, rare species, new records, Orthetrum brunneum 7070
- Austria, North Tyrol, Central Alps**, new records, geographical distribution, Arachnida 7069
- Austria, Scheibbs Region**, fauna, new records, geographical distribution, Polemistes shoormis, Sphecidae 4729
- Austria, Tyrol**, geographical distribution, species composition, Lepidoptera 7068
- Austrocercla columbae**, new species, taxonomy, morphology, Australia, Tasmania 2476
- Austroclerada**, new genera, Cleradini, Australia 3210
- Austrohartigia bicoloricanda**, new species, taxonomy, morphology 4842
- Austrohartigia chiconensis**, new species, taxonomy, morphology 4842
- Austrohartigia cortesi**, new species, taxonomy, morphology 4842
- Austrohartigia jujuyensis**, new species, taxonomy, morphology 4842
- Austrohartigia multidentata**, new species, taxonomy, morphology 4842
- Austrohartigia novae**, new species, taxonomy, morphology 4842
- Austrohartigia nigriventris**, new species, taxonomy, morphology 4842
- Austrohartigia shannoni**, new species, taxonomy, morphology 4842
- Austrolestes colensoensis**, thermoregulatory behavior, body temperature, New Zealand 6701
- Austrotenopon crocatus**, parasites, Numenius americanus, USA, New Mexico 3581
- Austropampantbus woodwardi**, new species, new genera, morphology, geographical distribution, Australia 825
- Austrosimulium australe**, life history, New Zealand, Waitakere R. 451
- Austrotacharda acedae**, pigments, biochemical analysis 4170
- Austrotomus**, taxonomy, morphology, keys, Australia 826
- Austroxestus carnarvonii**, morphology, taxonomy, Australia 826
- Austroxestus mouletiae**, new species, morphology, taxonomy, Australia 826
- Antecology**, Erora laeta, Erora quaderna sanfordi, North America 6329
- parasites**, books, Insecta 8708
- parasitoids**, methodology, weight, galls, Dryocossus kunrui 7576
- pests**, crops, books, Leguminosae, Bruchidae 8707
- soil fauna**, Curculionidae, Asia 8599
- soil fauna**, mining land reclamation, Opiella nova, Mixochthonus latceps, British Isles, England 8597
- vectors**, malaria, Plasmodium, Anopheles 7629
- zoogeography**, Halipidae, Denmark 5516
- Autogeny**, capture-recapture studies, blood meals, feeding, oviposition, Culex tarsalis 6745
- first record**, Tabanidae, Brazil 1132
- ovary development**, Chrysops ater, USA, New England 1131
- Autographa biloba**, larvae, seasonal variations, occurrence, host-parasite interactions, USA, Florida 1294
- Autographa braciae**, population studies, morphology, biogeography, Spain, Catalunya 7082
- Autographa californica**, pest control, pathogens, baculovirus 7371
- Autographa californica**, cell culture, nuclear polyhedrosis virus, DNA, restriction endonuclease mapping 5757
- nuclear polyhedrosis virus**, digestion fluids, Trichoplusia ni 5742
- nuclear polyhedrosis virus**, pathogenicity, Agrotis ipsilon 3402
- nuclear polyhedrosis virus**, pest control, Agrotis ipsilon, Zea mays 8454
- nuclear polyhedrosis virus**, virulence, diets, methoprene, pest control, Heliothis virescens 6967
- nuclear polyhedrosis virus**, virulence, Trichoplusia ni 3417
- parasitoids**, superparasitism, life history 8312
- Automation**, harvesting methodology, rearing, pupae, Diatraea grandiosella 8024
- rearing methodology**, larvae, Dacus cucurbitae, Dacus dorsalis, Ceratitis capitata 8020
- rearing systems**, methodology, pests, Diatraea grandiosella 4093
- Automation, (continued)**, sex determination, methodology, genetic factors, recombination, Ceratitis capitata 8009
- Automeris louisiana**, new species, taxonomy, morphology, USA, Louisiana 7228
- Autodiagraphy**, localization, α -aminobutyric acid transport, abdomen ganglia, Periplaneta americana 8066
- Avena**, crop fields, Coleoptera, fauna, species composition, Finland 2220
- host plants**, pest resistance, Schizaphis graminum 2835
- Avena byzantina**, host plants, pest resistance, Schizaphis graminum 2835
- plant diseases**, barley yellow dwarf virus, disease transmission, Rhopalosiphum padi 8468
- Avena sativa**, host plants, pest resistance, Schizaphis graminum 2835
- host plants**, pest resistance, Schizaphis graminum 9314
- Avermectins**, Streptomyces, toxicity testing, Insecta, Acan 4214
- Aves**, hosts, parasites, Iguanacarus 9
- migratory species**, infestation, parasites, Ixodes ricinus, Ixodes arboricola, Sweden 7549
- predation**, effects on population density, Choristoneura occidentalis 6026
- predation**, pest control, Psylla pyrcola 9334
- predation**, Plecoptera, USA, Michigan 6820
- predators**, pest control, forests, Opirophieta brumata, Tortrix viridana 3037
- Avian sarcosina virus**, DNA genomes, integration, eggs, embryos, Drosophila melanogaster 9379
- Avicennia alba**, defoliation, infestation, Cleora injectaria, Thailand 2853
- Avoidance behavior**, alarm pheromone, host plants, pest control, Aphididae 7337
- anti-predator behavior**, aggregation, Halobates robustus 8603
- beat**, Cicindela ocellata reutilata, USA, Texas 9118
- bites**, visual evoked response, Mansonia, Anopheles ziemanni 1919
- insecticides**, pest control, Copiotermes formosanus 8554
- locomotor activity**, predator-prey interactions, Halobates robustus 3651
- pests**, feeding, effects on grazing, cattle, Musca autumnalis 8568
- predation**, environmental conditions, Odonata 1289
- predators**, Acnidae, Uloboridae 9117
- predators**, sections, Notophthalmus viridescens, Dytiscus verticalis 3863
- Avoidance learning**, drug effects, cycloheximide, pyromyrmec, Periplaneta americana 3548
- mutants**, Drosophila melanogaster 427
- Axonopis gaduarrimensis**, new species, new records, geographical distribution, Spain 13
- Axon**, chemoreception, leg transplants, Sarcophaga bullata 2535
- growth**, peripheral nerves, central nervous system, embryogenesis, Acrididae 333
- neurons**, regeneration, muscles, Telegryllus oceanicus 2530
- regeneration**, Periplaneta 346
- sodium channels**, tetrodotoxin, binding, temperature-sensitive mutant, Drosophila 3415
- Azadirachta indica**, effects on parasitism, Telenomus remus, Spodoptera litura 6214
- extracts**, repellents, pest control, Vigna acatofolia host plants, Amsacta moorei 6923
- plant extracts**, neem oil, antifeedants, Schistocerca gregaria 7347
- plant extracts**, neem oil, toxicity, larvae, Culex fatigans 7396
- plant extracts**, toxicology, metamorphosis, larvae, Epilachna varivestis 3435
- seeds**, extracts, effects on metamorphosis, Ceratitis capitata 9153
- Azadirachtin**, effects on, oogenesis, ovary biosynthesis, Locusta migratoria 377
- moulting inhibitors**, pest control, Lepidoptera 9333
- Azinphos-methyl**, pesticide resistance, population genetics, Amblyseius fallacis 1063
- Azinphosmethyl**, insecticides, toxicity, Anthrenus grandis grandis 9026
- insecticides**, toxicity, Phyllonorycter blancardella, Apanetes ornigis 8200
- pesticide resistance**, selection, Amblyseius fallacis, Tetranychus urticae 3128
- Azores**, new species, taxonomy, morphology, Churothrips azoricus 849
- Aztec alfari**, association, host plants, Cecropia lyrtoloba nana 4403
- Baobab**, new genera, new species, 3 new species, morphology, taxonomy, India 34
- Baobab variata**, new records, geographical distribution, India 34
- Babesia**, disease transmission, role, salivary gland, Ixodidae 2917
- vectors**, livestock, Hyalomma marginatum rufipes 3693
- Babesia bigemina**, chemical control, imidacarp dipropionate, disease transmission, Boophilus decoloratus 6064
- infection**, cattle redwater fever vectors, effects on survival, sexual reproduction, Babesia bigemina 4205
- infection**, parasites, Boophilus microplus 8983
- infectivity**, disease transmission, cattle, Boophilus decoloratus 8420
- livestock**, infection, pest control, imidacarp dipropionate, primaquine 3682
- livestock**, pest control, Theileria sengeri, Babesia bigemina 3682
- parasites**, mortality, reproduction, vectors, Boophilus decoloratus 6025
- Babesia bovis**, disease transmission, livestock, Boophilus microplus 3832
- parasites**, effects on, oviposition, fecundity, hosts, Boophilus microplus 2038
- Babesia lotori**, parasites, transmission, Ixodes texanus, USA, Connecticut 1004
- Babesia microti**, babesiosis, Ixodes dammini disease transmission, Peromyscus leucopus, hamsters 8422
- disease transmission**, nymphs, Dermacentor marginatus, Dermacentor reticulatus, Haemaphysalis punctata, Rhipicephalus sanguineus, Ixodes hexagonus 8418

- Babesia microti**, (continued)
parasites, pathology, morphology, *Ixodes ricinus* 1005.
pathogens, transmission, *Ixodes dammini* 635
- Babesia motasi**,
new records, disease transmission, parasites, sheep, *Haemaphysalis punctata*,
British Isles 4538.
- Babesia occultans**,
new species, parasites, disease transmission, cattle, *Hyalomma marginatum rufipes*
6065
- Babesia ovis**,
parasites development, *Rhipicephalus bursa* 5024.
reproduction, parasites, *Rhipicephalus bursa* 4184.
- Babesiosis**,
Babesia microti, *Ixodes dammini* disease transmission, *Peromyscus leucopus*,
hamsters 8422.
disease transmission, livestock, *Boophilus microplus* 3832.
parasites transmission, *Babesia lotori*, *Procyon lotor*, *Ixodes texanus*, USA,
Connecticut 1004.
vectors, livestock, *Hyalomma marginatum rufipes* 3693.
- Babingtonia danieli**,
parasites, manne organisms 9
- Bacanius nobleti**,
new species, morphology, New Guinea 2393
- Bacanius wuensis**,
new species, morphology, New Guinea 2393.
- Baccharis halimifolia**,
host plants, feeding behavior deterrents, *Triphabda baccharidis* 5956.
- Bacillariophyceae**,
food organisms, food quality, effects on larvae growth, *Hydropsyche* 396
transmission, geographical distribution, Insecta 564
- Bacillus**,
infection, milky disease, pathogenesis, Insecta 7373
instars susceptibility, biological control, *Aedes stimulans* 1817
- Bacillus aficus caprai**,
eggs, morphology, ultrastructure 4937
- Bacillus cereus**,
pathogenicity, immune response, hemolymph, *Galleria mellonella* 5720
toxicity, biological control, *Manduca sexta*, *Aedes aegypti* 4186
- Bacillus larvae**,
aphidure, disinfection, methyl bromide 8527.
phages, isolation, morphology, ultrastructure, *Apis mellifera* 8138.
spores, distribution, colonies, *Apis mellifera* 1016.
- Bacillus popilliae**,
infection, hemolymph, blood cells, pathology, *Anomala corpulenta*, *Holotrichia*
obita 2640.
pathogenicity, biological control, Insecta 8120
pest control, biological control, Insecta 8532
- Bacillus rossius**,
eggs, shells, minerals 6633
- Bacillus sphaericus**,
biological control, larvae, *Culex nigripalpus* 6601.
infection, pests, biological control, *Aedes stimulans* 3664
instars susceptibility, biological control, *Aedes stimulans* 1817.
pathogenicity, biological control, Insecta 8120.
pathogenicity, temperature effects, *Culex fatigans*, *Anopheles subpictus* 2638.
toxicity, biological control, *Culex quinquefasciatus* 8160
toxicity, biological control, larvae, *Culex pipiens quinquefasciatus* 6600.
toxicity tests, mortality, instars, *Culex pipiens*, *Culex salinarius* 1842.
toxins, purification, biological control, *Anopheles* 8187.
- Bacillus thuringiensis**,
biological control, field trials, efficacy, *Trichoplusia ni* 6147.
biological control, fruit trees pests, *Archips argyrospilus* 679
biological control, *Heliothis* 9274.
biological control, pathogenicity, *Culicidae* 6602
biological control, pathology, *Lepidoptera* 997.
biological control, pest control, *Abies balsamea* forests, *Choristoneura*
fumiferana 8472.
biological control, pest control, *Diarsia obliqua* 5307.
biological control, pest control, *Galleria mellonella* 6900.
biological control, pests, stored products, *Plodia interpunctella*, *Ephestia*
cautella 8474.
δ-endotoxin, effects on gut histopathology, *Pieris rapae*, *Lymantria dispar*,
Ephestia cautella 7382.
δ-endotoxin, pathology, *Aedes aegypti* 2637.
δ-endotoxin, pathology, *Galleria mellonella* 1023.
δ-endotoxin, toxicity, histopathology, *Pieris rapae*, *Lymantria dispar*,
Ephestia cautella 7381.
endotoxins, mutagenesis, effects on RNA biosynthesis, Insecta 7369.
endotoxins, susceptibility, geographical variations, *Anopheles stephensi*, *Aedes*
aegypti, *Aedes albopictus*, India 8993.
endotoxins, toxicity, Insecta 7365.
exotoxins, feeding deterrents, *Agrotis ipsilon*, *Ostrinia nubilalis*, *Musca*
domestica 5779.
exotoxins, infection susceptibility, *Leptinotarsa decemlineata* 5734.
exotoxins, toxicity, *Agrotis ipsilon*, *Spodoptera frugiperda*, *Ostrinia nubilalis*
5051.
formulations, toxicity, pest control, *Anopheles arabiensis* 8121.
immunity, role, reticulo-epithelial tissue, *Locusta migratoria* 4192
infection, biological control, *Choristoneura fumiferana* 3041.
infection, efficacy, biological control, *Simulium* 3005.
infection, histopathology, Insecta 7375.
infection, trophallaxis, iodine radioisotopes, *Bifiditermes beesonii* 2554.
insecticides, pest control, cultivars, *Trichoplusia ni*, *Pieris rapae*, *Plutella*
xylostella, cultivars, *Brassica oleracea* 1834.
instars susceptibility, biological control, *Aedes stimulans* 1817.
pathogenicity, assays, standardization, larvae, *Culicidae* 8995
pathogenicity, biological control, Insecta 8120.
pathogenicity, digestive enzymes effects on, *Leucania separata* 999.
pathogenicity, environmental effects, *Culex pipiens*, *Aedes aegypti* 8996.
pathogenicity, mortality, *Culex quinquefasciatus* 3422.
pathogenicity, pest control, *Culicidae* 8997.
pathogenicity, serotypes, susceptibility, *Galleria mellonella* 5733.
pathogenicity, susceptibility, *Achaea janata*, *Spodoptera litura* 7378.
pathogenicity, toxicity, *Culicidae* 6599.
pathogens, biological control, *Chironomidae* 1007.
pathogens, biological control, *Culicidae* 630.
- Bacillus thuringiensis**, (continued)
pathogens, biological control, Insecta 2218.
pathogens, biological control, larvae, *Achoea janata* 2644.
pathogens, biological control, *Spodoptera littoralis* 1011.
pathogens, effects on larvae development, susceptibility, *Heliothis armigera*
7377.
pathogens, effects on survival, feeding, *Heliothis virescens* 8159.
pathogens, efficacy, *Heliothis virescens* 8160.
pathogens, mortality, biological control, *Spodoptera littoralis* 2643
pathogens, mortality, larvae, *Diarsia obliqua* 2985
pathogens, pest control, *Anticarsia gemmatilis*, *Cesotoma trifurcata* 2236.
pathogens, pest control, apiculture, *Galleria mellonella* 3834.
pathogens, pest control, biological control, *Leptinotarsa decemlineata* 1431
pathogens, pest control, *Lycopersicon esculentum* crop fields, *Lacanobia oleracea*
5300
pathogens, resistance, deficient mutant, gene expression, *Drosophila melanogaster*
3879.
persistence, biological control, *Heliothis virescens*, *Bacillus thuringiensis* 724.
pest control, biological control, *Culicidae* 9012.
pest control, biological control, *Epilachna varivestis* 8448.
pest control, biological control, feeding adjuvants, *Heliothis* 4605.
pest control, biological control, Insecta 8532.
pest control, efficacy, *Thaumetopoea pityocampa* 3833.
pest control, efficacy, *Trichoplusia ni*, *Heliothis zea* 8457.
pest control, environmental impact, population density, *Choristoneura*
occidentalis, Canada, British Columbia 4589.
pest control, exotoxins, *Epilachna varivestis* 4598.
pest control, *Lepidoptera*, vegetables 1836.
serotype H-14, pathogens, biological control, *Culex quinquefasciatus* 6159.
spores, crystals, toxicity, *Ostrinia nubilalis* 5780.
toxicity, bioassays, cells, culture, *Choristoneura fumiferana* 879.
toxicity, biological control, *Manduca sexta*, *Aedes aegypti* 4186.
toxicity, spores, spore crystals, *Ostrinia nubilalis* 5052.
toxins, toxicity *Trichoplusia ni*, *Aedes taeniorhynchus* 5765.
varieties, pathogenicity, *Culicidae* 2639.
- Bacillus thuringiensis israelensis**,
field trials, biological control, *Aedes vigilax*, *Culex sitiens*, Fiji 6150.
field trials, pasture, biological control, *Aedes*, USA, Montana 6149.
formulations, pathogenicity, soil characteristics effects on, *Culicidae* 7671.
infection, efficacy, biological control, *Simulium vittatum* 3756.
infection, pests, biological control, *Aedes stimulans* 3664.
pathogens, bioassays, *Aedes polynesiensis*, *Aedes pseudoscutellaris*, *Aedes aegypti*
5732.
pathogens, biological control, susceptibility, *Diptera* 7651.
pest control, efficacy, *Aedes aegypti* 5735.
pest control, efficacy, polluted environments, ponds, *Culex peus*, *Culex pipiens*
8402.
spores, biological control, pathogens, streams 6101.
toxicity testing, methodology, pest control, *Culex pipiens* 8119.
- Bacillus thuringiensis kurstaki**,
pest control, efficacy, *Aedes aegypti* 5735.
toxicity, control organisms, *Apanteles glomeratus*, *Pimpla turionellae* 7379.
toxicity, pest control, *Achaea janata* 7384
- Bacillus thuringiensis thuringiensis**,
toxicity, pest control, *Achaea janata* 7384.
- Bacotia alpinakili**,
new species, taxonomy, morphology 8768.
- Bacteria**,
aerobols, sampling, webs, Araneae 8469.
association, predators, *Metaseius occidentalis* 8170.
ocum, symbiosis, *Lohitia grandis* 4365.
contaminants, diets, rearing, *Heliothis* 735.
decomposition, leaf litter, deserts 2132.
diseases, pathogenesis, books, Insecta 7920.
diseases, pathogenesis, immune response 7374.
diseases, pathology, Insecta 7366.
effects on oviposition stimulation, *Hylemyia antiqua* 1136.
fruit trees pests biological control, methodology, *Archips argyrospilus* 679.
gut microflora, cellulose digestion, mutualism, *Orthoporus ornatus*, *Comanchelus*
8308.
gut, uric acid recycling, symbiosis, *Reticulitermes flavipes* 3574.
infection, effects on toxicity, insecticides, *Anthonomus grandis* grandis 8188.
infection, pathogens, *Boophilus decoloratus* 5030.
pathogens, biological control, *Bacillus sphaericus*, *Culicidae* 1382.
pathogens, disease transmission, *Argas persicus*, *Argas africanus* 4501
pest control, biological control, Insecta 8532.
symbionts, lipid biosynthesis, *Reticulitermes flavipes*, *Coptotermes formosanus*
3573.
symbionts, migrations, *Pediculus humanus* 4366.
symbionts, ultrastructure, flagella, *Psylla*, *Pyronympha* 5172.
Wolbachia, symbionts, effects on fertility, *Ephestia cautella* 501.
- Bactra verutana**,
fecundity, flight activity 6821.
larvae, diets, effects on, body measurements, head 380
- Bactriola minuscula**,
new species, taxonomy, morphology, Brazil 6363.
- Baculovirus**,
biological control, *Oryctes rhinoceros*, Western Samoa 6184.
biological control, pest control, Alabama argillacea 5409.
infection, activation, *Spodoptera*, *Heliothis* 2619.
infection, association, biological control, Insecta, larvae 8449.
infection, biological control, *Oryctes rhinoceros*, Tonga 1822.
infection, cell culture, *Heteronychia arator*, *Spodoptera frugiperda*, *Aedes*
albopictus 2650.
infection effects on larvae ultrastructure, histology, *Pandemis heparana* 1825.
isolation, cells, *Heliothis zea* 3392.
Oryctes, replication, cell culture, *Heteronychia arator*, *Spodoptera frugiperda*,
Aedes albopictus 880
pathogens, electron microscopy (scanning), ultrastructure, Insecta 8143.
pathogens, pest control, Glycine max crop fields, *Pseudaletia* includes 6138.
pathogens, pest control, *Oryctes rhinoceros*, Western Samoa 5348.
persistent infection, cell lines, *Spodoptera frugiperda* 1728.
pest control, biological control, Insecta 7371
- Baculovirus heliothis**,
biological control, *Heliothis* 9274.

- Baculovirus heliothis**, (continued)
pest control, biological control, feeding adjuvants, *Heliothis* 4605.
toxicity, adjuvants effects on, *Heliothis zea* 3450
- Baculum**,
development, embryos, parthenogenesis 5810.
eggs, shells, minerals 6633.
spermatoozoa storage, eggs fertilization 6654.
- Baculum extradatatum**,
spermatophores, occurrence, geographical distribution 5805.
- Badura**,
keys, taxonomy, morphology 4777.
- Baoceridium celebensis**,
new species, taxonomy, morphology, Sulawesi 5555.
- Baeidae**,
larvae, identification, morphology, North America 2498.
- Baetis**,
abundance, pathogens, ponds 1007.
new records, geographical distribution, Philippines 7191.
pollution effects, insecticides, streams 5437.
toxicity, Simulium larvicides, nontarget organisms 9016.
- Baetis chaetosensis**,
new species, taxonomy, morphology, USSR, Kazakhstan 7190.
- Baetis dardanus**,
larvae, morphology, Canada, Alberta 2497.
- Baetis rhodani**,
growth, productivity, life cycle 7012.
- Baetia beruensis**,
life history, ecology, USA, West Virginia, Mingo Co. 2292.
- Bagnaliola**,
synonymy, *Sophiotripis* 5610.
- Bagnara cruciferarum**,
circulatory system, neuroendocrine system, anatomy, neurosecretions 993.
insecticides, toxicity, plant extracts, *Centratherum anthelminticum*, *Cyperus rotundus*, *Strychnos nux-vomica* 6625.
pest control, extracts efficacy, *Acorus gramineus*, *Solanum xanthocarpum*, *Swertia chirayita* 7682.
- Bahama ls.**,
new records, geographical distribution, *Goetheana parvipennis* 4744.
new records, *Palmiculor palmarum* 1580.
new species, *Chaetophloeus atlanticus* 806.
taxonomy, morphology, new records, *Centruroides* 8744.
- Bait**,
attractancy, seasonal variations, copulation, *Shirahoshizo pini*, *Shirahoshizo nificens*, *Shirahoshizo insidiosus*, Japan 2901.
chemical control, toxicity, *Acromyrmex octospinosus* 2981.
food preferences, larvae, *Popillia japonica* 490.
light traps, hosts, CDC trap, *Culiseta melanura* 5620.
toxants, chemical control, efficacy, *Solenopsis invicta* 2192.
toxants, pest control, EL-468, Eli Lilly, *Solenopsis invicta* 3437.
toxicity, boric acid, jodanaphos gel, *Blattella germanica* 5776.
toxicity, chemical control, pest control, *Formicidae* 2991.
traps, larvae, *Ctenicera destructor*, *Hypolithus bicolor* 56.
wood, decay, *Liquidambar styraciflua*, *Gloeophyllum trabeum*, *Isoptera* 704.
wood, infection, *Gloeophyllum trabeum*, *Isoptera* 3250.
- Baiting**,
pest control, *Gryllidae* 1398.
traps, carion, demography, *Arthropoda* 1694
- Baita**,
attractancy, dispariure, analogs, *Portheria monacha* 6930.
attractancy, growth regulators, pest control, *Camponotus pennsylvanicus* 8969.
efficacy, trapping, *Blattella germanica* 9335.
trapping, attractancy, *Hylemyia antiqua*, *Hylemyia platara* 3580.
trapping, *Carpocoris niponensis*, *Grapholita molesta*, *Synanthedon hector*, *Archippus brevicauda*, Japan 5334.
- Bakerdania kielczewskii**,
new species, taxonomy, morphology, Poland 4761
- Bakerius amazonicus**,
new species, taxonomy, morphology, South America, Amazon R. Basin 4862
- Bakerius maculatus**,
new species, taxonomy, morphology, South America, Amazon R. Basin 4862
- Balanogaster**,
host plants, oviposition, development, *Cola acuminata*, *Cola verticillata* 8352.
- Balbiana rings**,
genes, cDNA nucleotide sequence, *Chironomus thummi* 6247.
restriction endonuclease mapping, DNA nucleotide sequence, chromosomes, salivary gland, *Chironomus tentans* 7830.
temperature induction, chromosomes, *Chironomus thummi* 7827.
- Balcitha**,
new records, geographical distribution, Panama 6422
- Balcitha abdominalis**,
host preferences, population density, grasses 710
- Balcitha woldai**,
new species, taxonomy, morphology, Panama 6422
- Baltic Sea**,
islands, new records, geographical distribution, *Sphecodes crastatus* 3942
- Banana**,
taxonomy, morphology, keys 6418
- Banasa roisotoni**,
new species, taxonomy, morphology 6418
- Banasa tumidifrons**,
new species, taxonomy, morphology 6418
- Banding**,
chromosome 3, gene mapping, *Drosophila melanogaster* 3070.
chromosomes, characterization, *Drosophila melanogaster* 3084.
chromosomes, diets effects on, enzymatic activity, *Aphididae* 3091.
chromosomes, heterochromatin characterization, *Drosophila hydei* 2317.
chromosomes, supernumerary heterochromatin effects on, *Heteropternis obscuritella* 6260.
heterochromatin, *Arcyptera fusca* 3085.
heterochromatin, nucleolus organizer region localization, *Chorthippus juncundus* 7825.
karyotypes, phylogeny, *Othellocladius* 2407.
metaphase chromosomes, heterochromatin distribution, comparison *Drosophila nasuta*, *Drosophila nasuta albomaculata* 6265.
patterns, polytene chromosomes, *Drosophila hydei* 7849.
- Banding**, (continued)
polytene chromosomes, *Anopheles stephensi* 5462.
- Bands**,
chromosomes, *Graphium sarpedon* 3891.
- Bangladesh**,
agriculture, economic analysis, pests, environmental factors, *Apis* 1411.
new records, infestation, pests, *Glycine max*, *Epilachna dodecastigma* 1247.
pests, infestation, seasonal variations, *Saccharum officinale*, *Tryporyza nivella* 1246.
- Barbados**,
livestock pests, surveys, infestation, *Isodoridae* 1328.
pest control, biological control, parasites, agricultural practices, *Diatraea saccharalis* 2951.
- Barbados, Coles Cave**,
surveys, community composition, zoogeography, *Invertebrata* 5439
- Barbara colfaxiana**,
dapsine induction, longevity, environmental factors 6640.
- Barbata caucasica**,
new species, taxonomy, morphology, USSR, Caucasus Mts. 6397
- Baris arctithorax**,
life history, host plants, *Portulaca oleracea* 6809
- Bark**,
species composition, ecological distribution, *Araneae*, Europe 9177.
- Barley yellow dwarf virus**,
detection, serological tests, *Aphididae* 6611.
disease transmission, *Rhopalosiphum padi* 8468.
disease transmission, *Rhopalosiphum padi* 9293.
disease transmission, vectors, *Rhopalosiphum rufiabdominalis* 7649.
effects on secretion, honeydew, *Sitobion avenae*, *Metopolophium dirhodum* 4617.
infection, *Rhopalosiphum padi* vectors, *Triticum* yield 8444.
- Barley yellow leaf virus**,
infectivity, *Rhopalosiphum padi*, *Rhopalosiphum maidis*, *Macrostiphus micantini* *avenae*, seasonal variations, Australia, Victoria 2618
- Barriers**,
chemical control, *Aphididae*, *Solanum tuberosum* 684.
crop fields, effects on abundance, distribution, *Chrysopa atlantica* 2151.
crop protection, light effects, colonization, behavior, *Myzus persicae* 1172.
pest control, alkathene bands, trees, *Mangifera indica*, *Drosicha mangiferae* 7748.
pest control, trees, *Mangifera indica*, *Drosicha mangiferae* 7754.
pitfall traps, efficiency, methodology 4085.
- Barroisina schneideri**,
ultrastructure, pathogens, infection, *Lithobius forficatus* 5754.
- Barutis**,
new genera, taxonomy 7950
- Barvina hartmanni**,
new species, taxonomy, morphology, Panama 7950.
- Barycoccus dudichii**,
parasitoids, new species, taxonomy, morphology, Philippines 7986.
- Barycoccus gallego**,
parasitoids, new species, taxonomy, morphology, Costa Rica 7986.
- Basally**,
new species, 6 species, soil fauna, India, Sri Lanka 4883
- Basidiomyces**,
cultivation, spatial distribution, larvae, *Lycionella agrarii*, Australia, New South Wales 2466.
culture, vectors, disease transmission, *Venturiella fungicola*, *Megaselia halitacea* 5394.
mercury, bioaccumulation, larvae, *Diptera* 5129.
- Basilia anaa**,
geographical distribution, new records, Sweden 3946.
- Basilia nattereri**,
geographical distribution, new records, Sweden 3946
- Basiliobolus**,
taxonomy, morphology 8
- Basitobolus parvatus**,
new species, morphology, geographical distribution, Japan 8.
- Bathycyba thalassina**,
developmental stages spatial distribution, effects on pesticide applications 581.
- Batocera lineolata**,
biometrics, mating behavior, oviposition, life history, Japan, Tokyo 5144.
mating behavior, activity patterns, dispersal, feeding behavior 2789.
- Batozonellus tricolor**,
prey 2146
- Batrachomorphus**,
new taxa, taxonomy, morphology, Africa 4865.
- Battus philenor**,
herbivory, host plants susceptibility, vegetation patterns effects on, *Aristolochia reticulata* 2072.
natural selection, pupation, site location 6293
- Beaches**,
association, *Ecklonia maxima*, *Laminaria pallida*, *Diptera*, *Coleoptera*, *Amphipoda* 541
- Beau curly dwarf mosaic virus**,
disease transmission, vectors, *Coleoptera*, Costa Rica 7658.
- Beau mild mosaic virus**,
disease transmission, vectors, *Coleoptera*, Costa Rica 7658.
- Beau yellow mosaic virus**,
host range, *Vicia faba* host plants, *Myzus persicae*, *Aphis fabae* 3707.
transmission, *Trifolium hybridum*, *Acyrtosiphon pisum* 8524.
- Beata albopicta**,
morphology, females, Brazil 8736.
- Beauveria**,
mycosis, chemical control, fungicides, *Bombyx mori* 6154.
pest control, control programs, forests, China 2216
- Beauveria alba**,
pathogens, infestation, abdomen, *Achaearanea* 3409.
- Beauveria basiana**,
biological control, *Cryptorhynchus lapathi*, China, People's Rep., Liaoning Province 2780.
biological control pathogens, fungicides effects on, *Curculio caryae* 1402.
infection, conidia, enzymatic activity, pathology, *Heliothis zea* 5028.
infection, overwintering larvae, *Laspresyia pomonella* 9004.
infection, pathology, *Heliothis zea* 5750.
pathogenicity, *Agaricus glomeratus* parasitism effects on, cuticle, *Pteris brassicae* 8132.
pathogenicity, bioassays, methodology, biological control, pests, *Trichoplusia ni*

- Beauveria bassiana**, (continued)
4094
pathogens, bioassays, *Trichoplusia ni* 8984.
pathogens ingestion, pathogenicity, *Reticulitermes* 8150.
pathogens, mortality, *Synanthedon salmactis*, New Zealand 4415.
pathogens, pesticides effects on growth, *Leptinotarsa decemlineata* 6152.
pathogens, production, biological control, *Leptinotarsa decemlineata* 1404.
pathogens, susceptibility, *Bombyx mori* 8130.
- Beauveria tenella**,
pathogenicity, *Cerambycidae* 2636.
- Bedellia ehkella**,
new species, taxonomy, morphology, Hungary, Budapest 8677.
- Bedellia somnulentella**,
life history, development, reproduction, longevity 6727.
- Beech bark disease**,
incidence, soils (calcareous), *Fagus*, *Cryptococcus fagisuga* 2964.
- Beehives**,
association, *Gluconobacter*, *Acetobacter* 8310.
parasites, occurrence, *Aeroglyphus robustus*, *Apis mellifera* 2026.
predation, apiculture, *Ursus americanus*, *Apis mellifera*, USA, North Carolina 5379.
- Beerellus**,
new genera, taxonomy 7955.
- Beerellus taxodii**,
new species, taxonomy, morphology 7955.
- Beet curly top virus**,
vectors, identification, enzyme-linked immunosorbent assay, *Citriculifer tenellus* 9273.
- Beet western yellows virus**,
disease transmission, strains, *Myzus persicae*, USA, Washington 6139.
- Beet yellows virus**,
vectors, host plants, weeds, *Myzus persicae*, USA, Washington 6175.
- Behavior**,
Apiocera exata, *Apiocera hispida*, *Apiocera haruspex atrifasciata*, *Rhaphiomidus aikeni*, USA, California 9087.
Apis mellifera, phenology, seeds, *Trifolium repens* 1970.
biology, apiculture, literature reviews, *Apis florea* 1436.
borers, Coleoptera, Lepidoptera 3628.
colonization, immigration, light effects, crop protection barriers, *Myzus persicae* 1172.
communication, natural selection, *Scolytidae* 4699.
effects on pest control, evaluation, insecticides, *Coptotermes formosanus* 4606.
effects on speciation, *Drosophila heteroneura*, *Drosophila silvestris* 1562.
effects on workers egg laying, *Bombus terrestris* 469.
environmental effects, humidity, hygrotaxis, feeding, *Cryptotermes* 5128.
hosts, parasitoids effects on, natural selection, survival 6752.
hosts, parasitoids effects on, survival, *Euphydryas phaeton* 1220.
larvae, *Copris lunaris* 3533.
life history, development, *Dysodia sicca*, Panama 1986.
males, life cycle, Tabanidae, France 9113.
manipulation, insecta neurotransmitters effects on 200.
moulting neurophysiology, abdomen, rhythms, *Schistocerca* 3278.
nests, prey, Pison, Australia 1957.
nutrition ecology, physiology, environmental changes, *Insecta* 4464.
oviposition, site selection, *Drosophila melanogaster* 405.
pests, *Saccharum officinale*, *Eldana saccharina*, Ivory Coast 2098.
pheromones olfactory perception effects on, strains, *Protoparce granarium* 1157.
pheromones response, threshold limits, males, *Grapholitha molesta* 420.
population dynamics, models, *Insecta* 4435.
Pseudoplusia includens 1973.
- Behavioral genetics**,
kin selection, altruism, Coleoptera 8670.
kin selection, altruism, social organization, *Insecta* 7028.
male selection, *Drosophila* 6678.
- Behning ulmeri**,
new records, ecological distribution, Czechoslovakia, Latorica R. 2355.
- Belgica antarctica**,
cold tolerance adaptations, freezing, Antarctica 2730.
- Belgica antarctica**,
metabolism, respiration, cold tolerance, acclimation 8107.
population structure, sex ratio, swarming, males, Antarctica 6016.
temperature tolerance, seasonal variations, Antarctica 1189.
- Belgium**,
agricultural land, species composition, Carabidae 9324.
air pollution, pollution monitoring, pollution indicators, *Humerobates rostratellatus* 5984.
check lists, species composition, *Auchenorrhyncha* 9482.
ecological distribution, habitat, Araneae 7582.
geographical distribution, occurrence, *Pollistes gallicus* 9484.
geographical distribution, *Pherbina coryleti*, *Pherbina intermedia*, *Pherbina mediterranea*, *Pherbina testacea* 6323.
geographical distribution, *Tetaneocera montana* 9485.
morphology, Chiroptera parasites, *Alalobocarpus minor*, *Alalobocarpus nyctali*, *Alalobocarpus intercalatus*, *Alalobocarpus plecoti* 5652.
new records, geographical distribution, morphology, *Gloma fuscipennis* 7892.
new records, geographical distribution, *Panamonops sukfinicus*, *Lephyphantiformis*, *Amilenus aurantiacus* 9483.
new species, *Laccobius elegans* 805.
surveys, species diversity, *Ichneumoninae* 6324.
- Belgium, Antwerp**,
water pollution, streams, community composition, *Chironomidae* 7810.
- Belgica antarctica**,
supercooling, cold hardness, Antarctic 3364.
- Beliardia sastylata**,
new species, morphology, China, People's Rep. 3197.
- Belostoma indicum**,
neurosecretion, optic lobe, cytology, histology 4180.
- Belostoma micantulum**,
brood care, paternal behavior, eggs, males, Paraguay 1147.
- Belotus acutipennis**,
new species, taxonomy, morphology, Brazil 6370.
- Belotus maculatus platonensis**,
new species, taxonomy, morphology, Brazil 6370.
- Belotus paranensis**,
morphology, females, Brazil 6370.
- Belvosia bicincta**,
parasites, morphology, *Pachylia syces* 6755.
- Bembidion**,
karyotypes, chromosome number, sex determination, 6 species 4682.
- Bembidion lampros**,
predators, pest control, *Delia brassicae* 2210.
susceptibility, terbufos, insecticides, *Brassica oleracea botrytis* 717.
- Bembidion properans**,
pests, *Triticum*, USSR, Ukraine 6919.
- Bembix allunga**,
nests, diets 6033.
- Bembix inyoensis**,
colonial characteristics, life history, nesting behavior 6982.
new species, taxonomy, morphology, USA, California 6431.
- Bembix kamulla**,
nests, diets 6033.
- Bembix kununurra**,
nests, diets 6033.
- Bembix mareeba**,
nests, diets 6033.
- Bembix octosetosa**,
nests, diets 6033.
- Bembix promontorii**,
nests, diets 6033.
- Bembix pruinosus**,
cuticles, chemical composition, organic compounds, USA, Colorado 107.
nesting behavior, site selection, social interactions 9356.
nesting behavior, spatial distribution, intraspecific relationships 5235.
- Bemisia hancocci**,
pests, new records, *Laurus nobilis*, British Isles 2977.
- Bemisia tabaci**,
chemical control, insecticides, systemic, aldicarb, thiofanax, bufencarb 6196.
cuticle, penetration mechanisms, infection, *Paeclomyces farinosus* 9003.
disease transmission, tomato leaf curl virus, insecticides effects on 3705.
disease transmission, vectors, leaf-curl, *Cucurbita maxima* 7656.
disease transmission, vectors, tomato yellow leaf curl virus 7655.
pest control, insecticides, crop protection, *Gossypium*, Thailand 4622.
pest outbreaks, damage, crop fields, USA, California 9290.
population dynamics, pests, Jordan 7622.
population levels, seasonal variations, viruses vectors 576.
vectors, plant diseases, cassava mosaic virus 7653.
- Benbowia elisabethae**,
new species, taxonomy, morphology, Sumatra 4042.
- Benodcarb**,
insecticides, toxicity, *Culex quinquefasciatus*, *Anopheles stephensi* 3442.
- Benjaminia euphydryadis**,
parasitoids, host searching behavior, hosts defense mechanisms, *Euphydryas phaeton* 5932.
- Benomyl**,
effects on population density, *Glycine max* crop fields, *Pseudoplusia includens* 2237.
insecticides, chemical control, trunk injection, trees, *Carya ilinoensis*, *Monelliopsis nigropunctata*, *Monellia caryella*, *Tinocallis caryaefoliae* 8566.
- Benthos**,
biomass, species composition, lakes, *Chironomidae*, New Zealand 7817.
Chironomus, community composition, correlation, algae, Canada 2295.
colonization, *Cheumatopsyche*, *Poania flava*, *Hydropsyche*, USA, Mississippi R. 6226.
community composition, *Ephemeroptera*, *Diptera*, Venezuela, Valencia L. 621.
community composition, pollution effects, temephos, streams, *Insecta* 7021.
drift, composition, environmental effects, Australia, A.C.T., Condor Creek 753.
ecological distribution, *Chironomidae*, Sweden, *Latnjajure* L. 7020.
functional morphology, water currents, streams, laser doppler anemometry, *Ecdyonurus venosus* 7026.
lotic environment, life history, seasonal variations, New Zealand, Waitakere R. 451.
overwintering, sediments, ice, *Tricoptera*, *Chironomidae*, Sweden, Vindelaven R. 3648.
pollution effects, streams, *Trichoptera*, *Diptera*, *Plecoptera*, *Ephemeroptera*, USA, Appalachian Mts. 7815.
streams, burrowing behavior, *Progomphus obscurus*, *Gomphomus externus* 7023.
streams, pollution effects, insecticides, *Insecta* 5437.
streams, species composition, predators population decline effects on, *Salvelinus fontinalis*, *Insecta* 8613.
- Benzanide**,
effects on larvae development, mortality, *Stomoxys calcitrans* 1128.
- Benzo(a)pyrene**,
bioaccumulation, depuration, *Chironomus riparius* 7813.
- Benzyli chrysanthemates**,
toxicity, neurophysiology, physicochemical properties, *Periplaneta americana* 5796.
toxicity, neurophysiology, symptoms, *Periplaneta americana* 5795.
- Benzyphenol**,
chemosterilants, chemical control, pesticide resistance, *Musca domestica* 8497.
- Beraca iglesiensis**,
new species, Sardinia 4066.
- Beraca moretti**,
new species, Sardinia 4066.
- Berdeniella**,
karyotypes, sex chromosomes, meiosis, males 2329.
- Berlese**,
new species, Greece 7142.
- Berytidae**,
host plants, feeding 8355.
- Beta vulgaris**,
biochemical characteristics, pests infestation effects on, *Aphis fabae* 7781.
crops, pests, natural enemies, predators, *Aulacorthum solani*, *Myzus persicae*, New Zealand 8492.
host plants, pest resistance, *Tetanops myopaeformis* 9350.
roots, absorption, insecticides, parathion 7747.
yellows, infection, *Aphis craccivora*, *Aulacorthum solani*, *Macrosiphum euphorbiae*, *Myzus persicae*, Tasmania 6097.
- Betula**,
galls, association, host plants, *Semudobia* 7565.
- Bezzia bivittata**,
phoresy, interspecific relationships, *Leptus* 6040.

- Beszia nobilis**,
larvotypes, feeding 9411.
- BHC**,
chemical control, pest control, *Spodoptera litura* 5355.
insecticides, dusts, efficacy, *Amnata biguttula biguttula* 7749.
- Bhutan**,
new records, geographical distribution, *Neopodononius similis* 4827.
- Bibliographies**,
books, *Pieris brassicae* 8710.
check lists, families, *Ephemeroptera* 7975.
data banks, *Lepidoptera* 4756.
enzyme-linked immunoassay, role, entomology 4092.
historical account, *Hippotion oasin*, Spain 3142.
new taxa, *Odonata* 7930.
nutrition, food conversion, *Insecta* 4757.
pests, *Boarmia selenaria* 6213.
pests, *Lygus* 3759.
pests, *Oulema melanopus*, North America 7928.
pests, *Solenopsis invicta*, *Solenopsis richteri*, USA 7929.
predators, *Aphidletes aphidimyza* 7927.
sense organs, electrophysiological recording, methodology, hemaphysaphy.
arthropoda 4758.
taxonomy, taxonomic revision, *Carpophilus humeralis* 3764.
Toxorhynchites 6338.
Xylodermus germanus, USA 7130.
- Bifiditermes besoni**,
parasites, hardwoods parasite resistance effects on feeding behavior 481.
- Bifiditermes**,
life history, ecological distribution, Africa 5520.
- Bifiditermes besoni**,
triphallaxis, dispersal, localization, iodine radioisotopes 2554.
- Bifiditermes durbanensis**,
life history, habitat, ecological distribution, Africa 5520.
- Bifiditermes sibayensis**,
life history, habitat, ecological distribution, Africa 5520.
- Bilari local**,
infestation, *Empoasca flavescens* 2158.
- Bile**,
pigments, chemical properties, role, photosensitivity, *Lepidoptera* 2601.
- Binding**,
cytochrome P-450, substrate specificity, microsomes, *Musca domestica* 6561.
DNA chromatin, light, *Drosophila melanogaster* 1510.
heterogeneity, juvenile hormones, fat body, *Blattodea* 209.
juvenile hormones, methoprene, hydroprene, hemolymph proteins, larvae, *Diatraea grandiosella* 207.
ligands, microsomes, cytochrome P-450, *Musca domestica* 6554.
muscarinic receptors, characterization, *Drosophila melanogaster* 114.
vitellin, molting hormones, eggs, *Locusta migratoria* 3515.
- Binopacryl**,
pesticide resistance, genetic analysis, *Panonychus ulmi* 7870.
- Bioaccumulation**,
ash, streams, *Hesperophila pacifica*, *Rhyacophila acropodes*, *Rhyacophila vao*,
Drunella doddsi, *Rithrogena robusta* 6236.
cadmium, effects on aging, temperature effects, *Drosophila melanogaster* 1037.
cadmium, radioisotopes, uptake, *Halobates nereis*, *Halobates flaviventris* 936.
depuration, benz(a)pyrene, *Chironomus riparius* 7813.
food chains, pollution effects, deposit feeders, toxicity testing, methodology 4314.
growth regulators, pests, chemical control, methoprene, cattle, *Haematobia irritans* 4520.
heavy metals, pollution levels, *Oniscus asellus*, British Isles 8186.
heavy metals, sex differences, rivers, *Dytiscidae*, USSR 5436.
insecticides, diflubenzuron, localization, tissues, histochemistry, *Pieris brassicae* 1059.
lead, pollution effects, *Aphodius*, *Sphaenidium*, USA, Kansas 608.
lipids, oocytes, hemolymph, vitellogenesis, *Locusta migratoria* 395.
mercury, *Basidiomycetes*, larvae, *Diptera* 5129.
mercury, food organisms, larvae, *Diptera* 2620.
mercury, methylmercury, pollution effects, *Calliphoridae* 7354.
metabolites, hemolymph, tyrosine metabolism, *Bombus mori* 2570.
6-methoxybenzoxazolinone, pest resistance methodology, *Zea mays*, *Ostrinia nubilalis* 8851.
molting hormones, steroids, ovary, *Bombus mori* 210.
mycotoxins, aflatoxins, biological control, *Aspergillus flavus*, *Zea mays*,
Ostrinia nubilalis 4625.
parathion-methyl, insecticides, chemical extraction, methodology, *Apis mellifera* 1069.
PCB, pollution effects, food chains, *Bacillus*, *Aedes aegypti*, *Lebistes reticulatus* 7811.
pesticides (organophosphorus), toxicity, larvae, *Bombus mori* 2663.
population genetics, pesticide resistance, DDT, 1015.
storage proteins, vitellogenin, developmental stages, *Bombus mori* 3498.
- Biochemical**,
sexual behavior, sexual maturity, *Physocheilus nebulosus* 2739.
stimulatory apparatus, sound frequency, *Hemidenna*, *Deinacrida* 5020.
- Bioassays**,
absorption, chloration, roots, crops, *Drosophila melanogaster* 7747.
antifeedants, chloridomorph, dipterans, larvae, *Spodoptera litura* 2654.
attractants, cuticle hydrocarbons, *Musca autumnalis* 1780.
brain hormones, indicator species, *Philosania ricini*, *Bombus mori* 7330.
dengue virus, use, *Toxorhynchites splendens* 1820.
feeding, chemical stimuli, host plants, host preferences, *Psosodes strobi* 5162.
insecticides, pesticide applications, *Choristoneura occidentalis* 4615.
juvenile hormones, morphogenesis, methodology, *Tribolium confusum* 4917.
mortality, nuclear polyhedrosis virus, *Neodipon sertifer* 5722.
ovicides, cytoprine, *Panonychus ulmi*, *Panonychus citri*, *Tetranychus urticae*,
Tetranychus kanzawai, *Tetranychus desertorum* 7398.
pathogenicity, methodology, biological control, pests, *Beauveria bassiana*,
Trichoplusia ni 4094.
pathogens, *Bacillus thuringiensis israelensis*, *Aedes polynesiensis*, *Aedes pseudoscutellaris*, *Aedes aegypti* 5732.
pathogens, *Beauveria bassiana*, *Trichoplusia ni* 8984.
pathogens infectivity, *Culicoides*, *Anopheles hali* 1039.
pheromones response, males, *Doryctra amatella* 400.
phosphate degradation, soil, temperature, *Drosophila melanogaster* 7402.
sensitivity, pheromones, *Solenopsis invicta* 1162.
- Bioassays, (continued)**
sex pheromone, chemical composition, *Dacus oleae* 5005.
soil toxicity, soil, *Musca domestica* 2656.
soil, toxicity testing, insecticides, *Bacillus*, *Diabrotica undecimpunctata* 4220.
spores, spore crystals, toxicity, *larvae thuringiensis*, *Ostrinia nubilalis* 5052.
tannins, herbivores, reviews, *Insecta* 6010.
toxicity, cells, culture, δ -endotoxin, *Bacillus thuringiensis*, *Choristoneura fumiferana* 879.
toxicity, spores, crystals, *Bacillus thuringiensis*, *Ostrinia nubilalis* 5780.
toxicity, venom, *Atrax* 1052.
tyrosine metabolism, *Aedes aegypti* 170.
- Biochemical**,
indicator species, oxygen depletion, freshwater environment, larvae,
Ephemeroptera 3852.
- Biochemical analysis**,
acetylcholinesterase, *Apis cerana indica* 4996.
attractants, host plants, *Allium porrum*, *Acrotopropsis assectella* 1240.
carotenoids, *Apis mellifera* 4157.
carbohydrates, diapause eggs, metabolism, *Attracta meentem* 1098.
central nervous system, identification, octopamine, methodology, *Manemstra configurata* 3282.
defence secretions, *Acorhionotermes subfusciceps* 3380.
defence secretions, *Amargus trusis* 3382.
defence secretions, *Nasutitermes* 3379.
defence secretions, *Carlsius walhbergi* 5018.
DNA nomads, transcription, RNA, *Drosophila melanogaster* 5681.
drosophera pigments, eye biosynthesis, *Drosophila melanogaster* 3325.
Dufour's gland secretions, *Halictus* 3384.
fat body, biosynthesis, respiratory pigments, *Blaberus discoidalis* 1774.
fatty acid synthesis complex, *Ceratitis capitata* 940.
hemocyanin, quaternary structure, *Euryptera californicum* 3305.
hemoglobin, *Chironomus thummi thummi* 3306.
hysteresis proteins, hemolymph, *Oncomeloid fasciatus* 1756.
isoenzyme proteins structure, *Heliothis zea* 885.
isoenzymes acetylcholinesterase, distribution, *Culex tarsalis* 189.
isoenzymes composition peptide mapping, *Drosophila melanogaster* 4670.
lipids, chironomids, resistance, susceptibility, anesthesia, *Drosophila melanogaster* 3447.
lipophorin, proteins, lipids, biosynthesis, vitellogenin, *Locusta migratoria* 3330.
metabolism, cyclic nucleotides, enzymes, proteins, phosphodiesterases, genetics, *Drosophila melanogaster* 3912.
neurosecretions, cells brain, *Trichoptera*, 992.
neurotransmitters, nervous central nervous system, *Insecta* 3284.
pheromones, mandibular glands, *Andrena haemorrhoa* 3351.
pheromones, mandibular glands, *Myrmica* 5867.
pigments, *Austrotachardia acaciae* 4170.
proteinase, *Bombus mori* 4993.
proteins, antibodies, *Drosophila melanogaster* 3270.
proteins, *Ammodendron Schocoveria gregaria* 3335.
proteins, cuticle developmental stages, *Locusta migratoria migratorides* 4120.
proteins, cuticle, larvae, cross-linking, *Sarcophaga bullata* 884.
proteins, venom, *Polistes comanchus navajo*, *Vespa orientalis* 4231.
scent gland oils, *Oncomeloid fasciatus*, *Pyrrhocoris apterus* 3377.
sex pheromone, chemical composition, females, *Cydia pomonella* 2600.
sex pheromone, courtship role, diets, *Ulethis ornatrix* 4304.
sex pheromone, haupensil, males, *Grapholitha molesta* 3349.
sex pheromone, *Loxys vindana* 1347.
sex pheromone, *Pandanus versatilis* 4166.
sex pheromone, pheromone traps, *Buxella fusca* 3354.
sex pheromone, *Plutella xylostella* 3346.
steroids brain, *Di. Att. cephalotes ischnicola* 5690.
steroids, defence secretions, *Phorhormotermes simplex*, *Schedorhormotermes lamanianus* 3383.
toxins, eggs, *Amblyomma hebraeum* 1070.
trail pheromone, *Myrmica rubra* 973.
venom, *Philaenus triangulum* 4215.
venom, *Philaenus triangulum* 4217.
venom, proteins, *Heterometrus scaber* 4178.
venom, toxins, proteins, *Heterometrus scaber* 4179.
volatiles, *Monocentrus ectatomoides*, *Polytrichus* 4995.
- Biochemical characteristics**,
adenylate cyclase, reviews, *Insecta* 5682.
alcohol dehydrogenase, genetic variance, natural selection, *Drosophila melanogaster* 3910.
correlation genotypes, *Gp6d* gene, *Gp6d* gene, *Drosophila melanogaster* 4687.
crop, wings removal effects on, *Solenopsis geminata*, *Solenopsis richteri* 1754.
cuticle sclerotization, *Locusta migratoria* 6520.
defence mechanisms, anthraquinones, anthrones, *Pyrrhalla lueola* 6734.
enzymes, cleavage, larvae, *Attacus megaloma* 597.
genetics, pesticide resistance, insecticides, aryl carbamates, *Metastelium occidentalis* 4688.
host plants, pest resistance, *Sorghum bicolor*, *Athensoga soccata* 7740.
host plants, pests infestation effects on, *Aphis fabae*, *Beta vulgaris* 7781.
hydrocarbons, taxonomy, *Onymacris plana*, *Onymacris rugosipennis* 5687.
hydrocarbons, taxonomy, *Physadema globosa*, *Stenocera gracilipes* 6565.
infection, larvae, *Lagenidium giganteum*, *Culicidae* 7372.
isoenzymes, analysis methodology, *Culicidae* 8012.
noethormone D, *Peniplaneta americana* 5698.
pancreas proteins, brain isolation, *Calliphora vomitoria* 963.
pheromones, *Tetranormus imparum* 3348.
Polysaccharide guilfoylei extracts, effects on development, reproduction, *Dysdercus cingulatus* 6650.
proteins, salivary gland, larvae, *Chironomus tentans* 6551.
queens, colonization, *Solenopsis invicta* 5716.
sex pheromone, *Xylomyges curvica* 5703.
tissues, body fluids, reviews, *Isoodae* 8939.
vitellin, amino acid composition, *Leucophaea maderae* 6552.
vitellin, insects 6549.
- Biochemical composition**,
diapause effects on, *Gryllus campestris* 1099.
eggs, embryogenesis, *Corycia cephalonica* 4244.
fatty acids, eggs, developmental stages, *Spodoptera littoralis* 1082.
sex pheromone, *Manemstra brassicae*, *Pseudodelia unipuncta* 971.

- Biochemistry,**
 allelochemical activity, aggregation pheromone, lineation, competition.
Trypandron lineatum, *Gnathotrichus reusus*, *Gnathotrichus sulcatus* 1776
 brain, cyclic AMP, *Manestria configurata* metamorphosis, *Manestria configurata* 960
 cold tolerance adaptations, alpine environments, Insecta, Canada 8103
 cold tolerance, adaptations, Insecta 956
 convergence evolution, *Anthropoda* 259
 cytochrome c, metamorphosis, *Musca domestica* 6555
 β -D-glucopyranosyl-O-L-tyrosine, development, larvae, *Plodia interpunctella*.
Ephestia cautella, *Thyridopteryx ephemeraefera* 6519
 hemolymph, environmental effects, stress, ontogeny, *Spodoptera exigua* 3371
 hydrocarbons, chemical ecology, reviews, Insecta 5655
 isocitrate dehydrogenase (NADP⁺), tissues distribution, imaginal discs.
Drosophila melanogaster 392.
 juvenile hormone esterase, inhibition, trifluoromethylketones, *Trichoplusia ni* 5790.
 lipoproteins, phenotypes, developmental stages, *Isotoma tigrina* 4155.
 oogenesis, embryogenesis, maternal effects, reviews, Insecta 5837
 pest resistance, *Sorghum bicolor*, Insecta 4564.
 toxins, venom, reviews, Insecta 5804
- Biocides,**
 toxicity, alkyl phenyl (dichloromethyl) phosphonates, *Culex fatigans*, *Drosophila melanogaster* 1053.
- Biodegradability,**
 pesticide applications, methodology, controlled conditions, cellophane bags 4621
- Biodegradation,**
 assimilation, saprophagy, *Armadillidium vulgare* 159
 pesticide resistance, paroxon, parathion, *Sancassania berlesii*, *Tetranychus urticae* 308
 pesticides (organophosphorus), malathion, enzymatic activity, *Tetranychus kanzawai* 3449
- Biogenic amines,**
 central nervous system, histochemistry, *Anthonomus grandis* 126
- Biogeography,**
 apiculture, diseases, parasites 5760
 bionomics, *Saissetia hemisphaerica*, Cuba 9095
 ecological distribution, community composition, Acridoidea, China, People's Rep 4450
 ecological distribution, ecological genetics, *Drosophila* 7649
 ecology, Lepidoptera, USA, California, *Trinitis* Apis 7122
 geographical distribution, new species, *Labioidiomidae* *coriscum*, Corsica 4454
 geographical distribution, species composition, Geometridae, Italy 7116
 habitat, geographical distribution, Euxoa, North America 3933
 islands, species richness, Araneae, South Africa Coast 6848
 life cycle, *Alcimurus schaefferi* 9103.
 new species, taxonomy, *Rhegmatophila ausseii* 4048.
 occurrence, Bothridiidae, Africa, South 9486
 phylogeny, geographical distribution, photoperiods effects on, *Lepidoptera* 2136.
 phylogeny, taxonomy, Clambidae, North America 1576.
 population dynamics, pest control 5305.
 population studies, morphology, *Autographa bractea*, Spain, Catalunya 7082.
 sea marshes, islands, recolonization, *Artropoda*, USA, Florida Coast 5264.
 speciation, phylogeny, *Idonia nictellus* 7881.
 species composition, montane environments, *Lepidoptera*, USA, Nevada, Spring Range 7914.
 streams, rivers, Insecta, Australia, New Zealand 3952.
 taxonomy, Araneae 1568.
 taxonomy, morphology, keys, *Paracletus* 4898.
 taxonomy, phylogeny, *Philotarsus* 4909.
- Biological activity,**
 molting hormones, ecdysones, analogs, *Culicidae* 5003.
- Biological control,**
Aonidiella auranti, orchards, effects on community structure, *Formicidae* 2879.
 application pests, pathogens, nuclear polyhedrosis virus, *Galleria mellonella* 8456.
 applications methodology, fruit trees pests, *Bacillus thuringiensis*, *Archips argyrospilus* 679.
 aquatic plants, weeds, rearing, Arizona dead, *Eichhornia crassipes* 3550.
 aquatic weeds, *Hydrilla verticillata*, *Paraponyx rugosalis*, USA 2204.
 association, baculovirus, cytoplasmic polyhedrosis virus, infection, Insecta, larvae 8449
 attractants, efficacy, *Musca domestica* 743.
 baculovirus infection, *Oryctes rhinoceros*, Tonga 1822.
Beauveria bassiana, *Cryptorhynchus lapathi*, China, People's Rep., Liaoning Province 2780.
 control programs, parasitoids, *Trichogramma* 1421.
 control programs, review, *Culicidae* 643.
 crop field, predators, *Trichoplusia ni*, *Lasiudora riparia* 2222.
Culex quinquefasciatus, larvae, toxins effects on, *Chlorella ellipsoidea* 1353.
Curtolus caryae, fungicides effects on pathogens, *Beauveria bassiana*, *Metarhizium anisopliae* 1402.
 defoliation, infection, *Bacillus thuringiensis*, *Choristoneura fumiferana* 3041
 disease transmission, vectors, developing countries, Insecta 3666.
 disease transmission vectors, parasites, *Mermithidae*, *Culicidae* 3661.
 disease transmission, pathogens, *Galleria rufa* 281.
 Dutch elm disease, *Scolytus multistriatus* vectors, *Pseudomonas syringae* pathogens 4526.
 efficiency, predatory behavior, *Euthyrhynchus floridanus* excretory products effects on, *Pentatomidae* 2898.
 environmental effects, neuroendocrine system, Insecta 3338.
Eupatorium adenophorum, *Procecidochares utilis*, India 3615.
 farm management, pest control, entomology 686.
 feeding adjuvants, *Bacillus thuringiensis*, *Baculovirus heliothis*, *Heliothis* 4605.
 feeding adjuvants, *Bacillus thuringiensis*, *Baculovirus heliothis*, *Heliothis* 9274.
 feeding behavior, effects on mortality, *Bacillus sphaericus*, *Culicidae* 1382.
 fertility, competition, males, *Anthonomus grandis* grandis 2677.
 field trials, *Bacillus thuringiensis* israelensis, *Aedes vigilax*, *Culex* sitiens, Fiji 6150.
 field trials, efficacy, *Bacillus thuringiensis*, *Trichoplusia ni* 6147.
 field trials, pasture, *Bacillus thuringiensis* israelensis, *Aedes*, USA, Montana 6149.
 granulosis virus, Insecta 3426.
 granulosis virus, *Laspeyresia pomonella* damage *Malus pumila* 8440.
 granulosis virus, reviews, Insecta 4505.
 granulosis virus, temperature, *Pieris rapae* 2942.
Heliothis zea nuclear polyhedrosis virus, replication, cell lines 3414.
- Biological control, (continued)**
 herbivores, population dynamics, *Chrysomelidae*, agricultural ecosystems 2211.
 historical account, *Chrysobothris laricicellae*, *Coleophora laricella*, North America 3028.
 host preferences, host plants, *Apanetes flavipes*, *Chilo partellus* 2979.
 hosts, *Nematoda* parasites, Insecta 3614.
 hosts, parasites effects on, pathology, *Mermithidae*, Insecta 3749.
 infection, efficacy, *Bacillus thuringiensis* israelensis, *Simulium vittatum* 3756.
 infection, efficacy, *Bacillus thuringiensis*, *Simulium* 3005.
 infection, larvae, diets, *Brugia pahangi*, *Aedes aegypti* 1358.
 infection, mortality, *Aedes aegypti*, *Bacillus thuringiensis* 3423.
 infection, mortality, *Neoplectana carpcapae*, *Ctenocephalides felis* 6612.
 infection, nuclear polyhedrosis virus, *Burura suppressaria*, China, People's Republic, Human Province 2649.
 infection, parasites, susceptibility, developmental stages, *Romanomermis culicivorax*, *Culex pipiens* 1438.
 infection, soil, *Neoplectana carpcapae*, *Spodoptera exigua* 6160.
 Insecta, pathogens, fungi 1471.
 integrated control, *Chilo partellus* 3033.
 integrated control, pest control, *Atherigona soccata* 4570.
 integrated control, pest control, *Planococcus citri*, *Dialeurodes citri*, Italy 3722.
 interspecific relationships, competition, pest control, 715.
 interspecific relationships, survival, *Musca vetustissima*, *Onitis alexis*, *Onthophagus binodis*, *Onthophagus ferox*, Australia 1308.
 introduced species, infection, paroxonism, *Nosema pyrausta*, *Macrocerus grandis*, *Ostrinia nubilalis* 6029.
 kairomones, effects on host searching behavior, *Trichogramma pretiosum*, *Heliothis zea* 423.
 kairomones, host searching behavior, hosts, eggs, *Trichogramma pretiosum* 3357.
 larvae, *Culex nigripalpus*, *Bacillus sphaericus* 6601.
 larvae susceptibility, pathogens, disease transmission, *Anopheles stephensi* 654.
Leptinotarsa decemlineata, pathogens, production methodology, *Beauveria bassiana* 1404.
 malaria vectors, parasites, *Romanomermis culicivorax*, *Anopheles albimanus*, El Salvador 7645.
 malaria vectors, reviews, *Culicidae* 8409.
 male sterility, population dynamics, mathematical models, Insecta 2943.
 mass rearing methodology, parasites, *Filipjevimeris leipandra*, *Diabrotica balteata* 8494.
 mass rearing, parasites, *Howardula husseyi*, *Megaselia halictaria* 3027.
 mating behavior disruption, sex pheromone, crop fields, *Heliothis virescens* 3763.
 methodology, comparative studies, pheromone traps, *Scolytus scolytus*, pheromone traps 1464.
 microsporidiosis persistence, *Nosema pyrausta*, *Vairimorpha necatrix*, *Ostrinia nubilalis* 8495.
 mortality, susceptibility, infection, *Vairimorpha necatrix*, *Lepidoptera* 2965.
Musca domestica, pupae parasites, *Muscidifurax raptor*, *Spalangia cameroni* 708.
 natural enemies, competition, *Homoptera*, *Lepidoptera*, *Coleoptera* 6095.
 natural enemies, host plants effects on, *Myzus persicae* 723.
 natural enemies, *Phenacoccus manihoti*, Africa 1194.
 nuclear polyhedrosis virus DNA, infectivity, *Trichoplusia ni* 1034.
 nuclear polyhedrosis virus, granulosis virus, safety regulations, Insecta 3708.
 nuclear polyhedrosis virus infection, larvae, *Trichoplusia ni* 1036.
 nuclear polyhedrosis virus, virulence, rearing, Insecta 3828.
 onchocerciasis vectors, pathogenic bacteria, *Bacillus thuringiensis*, *Simulium ochraceum*, Guatemala 626.
 parasite resistance, *Ixodidae*, *Ungulata*, Zimbabwe 633.
 parasites dispersal, *Aleurocanthus woglumi*, *Amittus hesperidum*, *Encarsia opulenta*, USA, Florida 4544.
 parasites, eggs encapsulation, *Metaphycus swirskii*, *Saissetia oleae* 5175.
 parasites, *Gascardia destructor*, *Anicetus comatus* 2938.
 parasites, host preferences, *Sturmipops inferens*, *Chilo infuscatellus*, *Chilo arcuatus*, *Aciogenia stenellus* 1216.
 parasites, infection, pathogens, *Neoplectana carpcapae*, *Hypostrongylus* *exiguae* 1804.
 parasites infestation, *Nematoda*, *Cephalix lariciphia* 2959.
 parasites occurrence, *Lydeella thompsoni*, *Ostrinia nubilalis*, USA, Delaware 2033.
 parasites, pathogens, *Persea americana*, *Pseudococcus longispinus*, *Cryptoblabes gndiella*, *Boarmia selenaria*, Israel 5390.
 parasites, population establishment, survival, *Romanomermis culicivorax*, *Aedes polynesiensis*, *Tokeleas* Is. 7630.
 parasites, predation, *Scarabaeidae*, *Taenia saginata*, Kenya 1317.
 parasitism, pupae, susceptibility, *Neoplectana carpcapae*, *Lepidoptera* 287.
 parasitoids, population density effects on host-parasite interactions, Insecta 3575.
 parasitoids, urban environment, *Rhopalosiphum californica*, USA, California 4572.
 pathogenicity, *Bacillus thuringiensis*, *Bacillus sphaericus*, Insecta 8120.
 pathogenicity, *Bacillus thuringiensis*, *Culicidae* 6602.
 pathogenicity, *Bacillus thuringiensis*, *Culicidae* 8995.
 pathogenicity, *Bacillus thuringiensis*, *Culicidae* 8997.
 pathogenicity, environmental effects, *Bacillus thuringiensis*, *Culex pipiens*, *Aedes aegypti* 8996.
 pathogenicity, mortality, *Metarhizium anisopliae*, *Nasutitermes exitiosus* 8165.
 pathogenicity, soil characteristics effects on, formulations, *Bacillus thuringiensis* israelensis, *Culicidae* 7671.
 pathogens, *Bacillus thuringiensis*, *Chironomidae* 1007.
 pathogens, *Bacillus thuringiensis*, *Culicidae* 630.
 pathogens, *Bacillus thuringiensis*, Insecta 2218.
 pathogens, *Bacillus thuringiensis* israelensis, *Aedes polynesiensis*, *Aedes pseudoscutellaris*, *Aedes aegypti* 5732.
 pathogens, *Bacillus thuringiensis*, serotype H-14, *Culex quinquefasciatus* 6159.
 pathogens, *Bacillus thuringiensis*, *Spodoptera littoralis* 1011.
 pathogens, conferences, *Culicidae* 7128.
 pathogens, effects on mortality, *Stenophorus zeamais* 2039.
 pathogens effects on, reproduction, development, *Nosema algerae*, *Anopheles stephensi* 739.
 pathogens, Entomophthora phytonomi, photoperiods, humidity, effects on, *Hypera postica* 286.
 pathogens, exotoxins, *Bacillus thuringiensis*, *Epilachna varivestis* 4598.
 pathogens, functional morphology, dimorphism, *Xenorhabdus*, *Galleria* 4189.
 pathogens, fungi, culture methodology, environmental conditions, *Venturium lecanii* 4920.
 pathogens, fungicides effects on, *Nomuraea rileyi*, *Lepidoptera*, *Glycine* max 716.
 pathogens, granulosis virus, biochemical characteristics, *Pieris brassicae*, *Pieris rapae* 1468.

Biological control, (continued)

- pathogens, infectivity, Microsporidia, *Aedes aegypti* 8127
 pathogens, larvae, *Bacillus thuringiensis*, *Achoa* janata 2644
 pathogens, larvae, *Bacillus thuringiensis*, *Diarsia* obliqua 2985
 pathogens, mortality, *Bacillus thuringiensis*, *Spodoptera littoralis* 2643
 pathogens, nuclear polyhedrosis virus, *Bacillus thuringiensis*, *Choristoneura occidentalis*, Canada, British Columbia 4589
 pathogens persistence, *Bacillus thuringiensis*, *Trichoplusia ni*, *Heliothis virescens* 724
 pathogens, spores, *Bacillus thuringiensis israelensis*, streams 6101
 pathogens, storage, *Vorticellium lecanii*, Insecta 2217
 pathogens susceptibility, Diptera, *Bacillus thuringiensis israelensis* 7651
 pathogens susceptibility, instars, *Bacillus thuringiensis*, *Aedes simulans* 1817
 pathogens, *Teleglytus communis*, Australia, Victoria 1003
 pathogens, toxins purification, *Bacillus sphaericus*, *Anopheles* 8187
 pathogens, *Vorticellium lecanii*, *Trialeurodes vaporariorum*, *Aphis gossypii* 8577
 pathology, *Bacillus thuringiensis*, *Lepidoptera* 997
 pathology, parasites effects on, pathology, *Mermithidae*, *Simuliidae* 3403
 pest control, *Abies balsamea* forests, *Choristoneura fumiferana*, *Bacillus thuringiensis* 8472
 pest control, agricultural ecosystems 3029
 pest control, *Albica aragillacea*, *Bacillus thuringiensis*, nuclear polyhedrosis virus 5409
 pest control, *Anopheles arabiensis*, toxicity, formulations, *Bacillus thuringiensis*, *Anopheles arabiensis* 8121
 pest control, antidiarrhoeals, *Neoplectana carposcapae*, *Leptinotarsa decemlineata* 3778
 pest control, *Atherigona soccata* 4556
 pest control, *Bacillus thuringiensis*, *Culicidae* 9012
 pest control, *Bacillus thuringiensis*, *Diarsia* obliqua 5307
 pest control, *Bacillus thuringiensis*, *Galleria mellonella* 6900
 pest control, baculovirus, Insecta 7371
 pest control, colonization, *Coccinella septempunctata*, *Monella caryella*, *Monellipolia nigropunctata*, *Melanocallis caryaeifolia* 694
 pest control, development, viruses 5392
 pest control, *Diatraea saccharalis*, USA, Florida 3777
 pest control, efficacy, polluted environments, ponds, *Bacillus thuringiensis israelensis*, *Culex pipiens*, *Culex pipiens* 8402
 pest control, *Epilachna varivertis*, *Bacillus thuringiensis* 8448
 pest control, forests, *Enaphalodes rufus*, USA, Ohio 2209
 pest control, genetics, infection, *Plasmodium yoelii* infections, *Anopheles gambiae* 5338
 pest control, greenhouses, *Anthonomus nemorum*, *Trialeurodes vaporariorum* 7708
 pest control, greenhouses, *Trialeurodes vaporariorum*, *Encarsia formosa*, Japan 7789
 pest control, Homoptera, Southeast Asia 1451
 pest control, host-parasite interactions, *Thymelicus lineola*, pathogens, *Zoophthora radicans*, *Entomophthora gressa* 3420
 pest control, Insecta, *Nematoda* 7664
 pest control, Insecta, *Nematoda* 7667
 pest control, male sterility, population density, models 714
 pest control, natural enemies, *Pseudococcus comstocki*, USA, California 3018
 pest control, natural enemies, *Rhopalosiphum californicum* 6171
 pest control, natural enemies, *Spodoptera praefica*, USA, California 4626
 pest control, New Guinea 5357
 pest control, nuclear polyhedrosis virus infection, mortality, *Diarsia obliqua* 7389
 pest control, nuclear polyhedrosis virus, safety, public health, *Maestra brassicae* 7717
 pest control, orchards, *Tetranychidae*, *Malus pumila* 8517
 pest control, *Pantophytes*, New Guinea 2989
 pest control, parasites, agricultural practices, *Diatraea saccharalis*, Barbados 1951
 pest control, parasites, *Aleurocanthus woglumi*, USA, Florida 2946
 pest control, parasites, *Aphytis holozantus*, *Chrysomphalus aspidum*, USA, Texas 3798
 pest control, parasites, *Cimicidomys*, *Chrysomelidae*, USA, Texas 6116
 pest control, parasites, *Chrysomelidae*, *Liriomyza sativae*, *Liriomyza trifolii*, USA, Texas 4600
 pest control, parasites, environment conditions, *Brachionet*, *Ephestia cautella* 2025
 pest control, parasites, *Lixophaga diatraea*, *Diatraea saccharalis*, USA, Louisiana 2957
 pest control, parasites, methodology, *Trichogramma*, *Heliothis* 1448
 pest control, parasites, *Prospaltella pemicius*, *Quadrastipoides pemicius*, Greece 2956
 pest control, parasites, *Trialeurodes vaporariorum* 7778
 pest control, parasites, *Trioxya complanatus*, *Thenoaphis trifolii*, Australia, South Australia 3821
 pest control, parasitoids, *Brachymeria lasus*, *Coccycornus disparis*, *Lymantria dispar*, USA, Connecticut 8466
 pest control, parasitoids, habitat preferences, *Comptosia concinnata*, *Lymantria dispar* 831
 pest control, parasitoids, reviews, Insecta 7665
 pest control, parasitoids, *Spodoptera littoralis*, Cyprus 2810
 pest control, parasitoids, *Vespidae*, Diptera 9322
 pest control, pathogens, baculovirus, *Glycine max* crop fields, *Pseudoplusia includens* 6138
 pest control, pathogens, baculovirus, *Metarhizium anisopliae*, *Oryctes rhinoceros*, Western Samoa 5348
 pest control, pathogens, efficacy, *Aedes aegypti* 5735
 pest control, pathogens, efficacy, *Aphis fabae*, *Entomophthora* 3038
 pest control, pathogens, Insecta 8532
 pest control, pathogens, *Lacanobia oleracea*, *Bacillus thuringiensis* 5300
 pest control, pathogens, *Leptinotarsa decemlineata*, *Bacillus thuringiensis* 1431
 pest control, pathogens, *Nosema locustae*, *Melanoplus sanguinipes* 3813
 pest control, pathogens, parasites, interaction, models 1455
 pest control, pathogens, *Phyllocoptruta oleivora*, *Hirsutiella thompsonii*, USA, Florida 4548
 pest control, pathogens, *Vainormorpha necatrix*, *Nosema pyrausta* 8125
 pest control, pathogens, *Vorticellium lecanii*, *Trialeurodes vaporariorum* 4623
 pest control, *Persea plantations*, natural enemies, *Pseudococcus longispinus* 2945
 pest control, population dynamics, mathematical models, pathogens, Insecta 8452
 pest control, predator, *Solenopsis invicta*, *Anthonomus grandis* 2200
 pest control, predators, *Carabidae*, *Diabrotica* 6086
 pest control, predators, *Coccinellidae*, *Rhopalosiphum maidis*, *Zea mays* 5295

Biological control, (continued)

- pest control, predators, *Formicidae*, *Laphygma exigua* 5368
 pest control, predators, *Megaderma lytta* lyra, Insecta, India 5214
 pest control, predators, pesticides effects on, *Phytoseiulus persimilis*, *Tetranychus urticae* 3766
 pest control, predators, *Phytoseiulus persimilis*, *Tetranychus urticae*, British Isles 3023
 pest control, predators, *Solenopsis invicta*, *Nezara viridula* 3790
 pest control, reviews, fungi, Insecta 8509
 pest control, reviews, *Nematoda*, Insecta 7666
 pest control, stored products, Insecta 2984
 pest control, stored products, predators, *Ephestia cautella*, *Blattisocius tarsalis* 2955
 pest control, toxicity, *Bacillus thuringiensis thuringiensis*, *Bacillus thuringiensis kurstaki*, *Achoa janata* 7384
 pest control, vegetables, larvae, *Lepidoptera* 3744
 pest control, water pollution, effects on infection, *Lagenidium giganteum*, *Culex quinquefasciatus* 4513
 pest outbreaks, parasites, *Aleurocanthus woglumi*, USA, Florida 1420
 pest outbreaks, parasites, *Leptomastix dactylopi*, *Phanococcus citri* 675
 pest outbreaks, parasites, *Neoplectana carposcapae*, *Pronoxystus roburiae* 733
 pest outbreaks, parasitoids, *Zetruphera daniana*, Switzerland 7546
 pest outbreaks, population regulation, models 6142
 pest resistance, salivary gland antigens, *Dermentarium andersoni* 6058
 pesticide resistance, selection, permethrin, *Amblyseius fallacis* 6288
 pests, baculovirus, *Oryctes rhinoceros*, Western Samoa 6184
 pests, bioassays, pathogenicity, methodology, *Beauveria bassiana*, *Trichoplusia ni* 4094
 pests, crop protection, *Zea mays*, *Chilo partellus*, India 2958
 pests, crop rotation, *Ostrinia nubilalis*, Switzerland 6917
 pests, *Earias*, *Pectinophora gossypiella* 1444
 pests, field trials, parasites, *Neoplectana bibionis*, *Synanthedon tipuliformis* 7767
 pests, forest management, Insecta, Germany, Fed Rep 1392
 pests, fruit trees, *Aphytis lepidosaphes*, *Leptomastix beckii*, Spain, Valencia 1458
 pests, infection, *Bacillus thuringiensis israelensis*, *Bacillus sphaericus*, *Aedes simulans* 3664
 pests infection, parasites *Neoplectana bibionis*, *Synanthedon tipuliformis* 2207
 pests, infection, *Plethrophora schubergeri*, *Choristoneura fumiferana* 3812
 pests, larvae, *Cochliomya hominivorax* 3007
 pests, mycotoxins, aflatoxins, *Aspergillus flavus*, *Zea mays*, *Ostrinia nubilalis* 4625
 pests, natural enemies, sex pheromone, *Pectinophora gossypiella*, comparative studies, USA, Arizona 1463
 pests, *Neoplectana carposcapae*, *Pyrrhalla luteola*, *Choristoneura occidentalis* 2953
 pests, parasitism, *Heterorhabdus heliothidis*, *Ooorthynchus sulcatus* 2188
 pests, parasitoids, *Torymus devexicornis*, *Scaphisoma*, Japan 4545
 pests, pathogens, crop fields, *Entomophthora*, *Aphis fabae* 7760
 pests, pathogens, nuclear polyhedrosis virus, efficacy, *Ostrinia nubilalis* 8443
 pests, pesticide resistance, chemical control, agricultural practices, *Diatraea saccharalis* 1430
 pests, predation, *Ornus insidiosus*, *Sericothrips variabilis* 2138
 pests, predation, *Panonychus ulmi*, *Tetranychus urticae*, *Comptosia esbenpetrensis*, Italy 2813
 pests, predators, *Hypera postica*, *Sitona hispidula* 612
 pests, predators, *Parabemisia myricae*, USA, California 1435
 pests, predators, *Phytoseiulus macropilis*, *Phytoseiulus persimilis*, *Tetranychus urticae* 2205
 pests, stored products, *Bacillus thuringiensis*, *Plodia interpunctella*, *Ephestia cautella* 8474
 pests, *Trichogramma ivelae*, *Heliothis punctiger* 1410
 pheromone traps, attractants, *Ipys typhraphus* 705
 plant extracts, effects on parasitism, *Heliothis*, *Trichogramma* 5382
 pools, *Dugesia nigra*, *Culicidae*, USA, North Carolina 2927
 population dynamics, environmental effects, *Choristoneura terminifera* 7601
 predation, larvae, *Mesocyclops leuckarti* pilosa, *Aedes aegypti*, *Aedes polynesiensis* 4503
 predation, population dynamics, *Acyrtosiphon pisum* 2866
 predation, population regulation, *Pseudococcus*, *Saissetia oleae*, *Cryptolaemus montrouzieri* 3611
 predator-prey interactions, *Tetranychus urticae*, *Phytoseiulus persimilis*, *Amblyseius pontilliae*, *Amblyseius hibens*, *Metatsetius occidentalis* 8709
 predators, *Carabidae*, *Staphylinidae*, *Delia brassicae* 2210
 predators, *Coccinellidae*, *Temnaspis*, *Staphylinidae*, New Hebrides 4576
 predators, *Culicidae*, *Gambusia affinis* 617
 predators, effects on, *Chermes* *climacodes*, *Phytoseiulus persimilis* 1265
 predators, eggs, *Diabrotica*, *Solenopsis geminata*, *phlebotomus*, Costa Rica, 2993
 predators, mass rearing methodology, *Anthonomus nemorum* 2259
 predators, vectors, disease transmission, *Torhyrachites*, *Culex* 2861
 replication, nuclear polyhedrosis virus, granulosis virus, Insecta 3394
 RNA viruses, Insecta 8147
Scolytus multistriatus, parasites, *Dendroctonus ponderans*, *Entedon leucogramma* 2017
 sex pheromone, air permeation technique, *Spodoptera frugiperda*, *Heliothis zea* 8546
 sex pheromone, effects on insecticides efficiency, *Musca domestica* 697
 sex pheromone, population density, effects on mating, *Heliothis zea* 9298
 suitability tests, parasites, developmental stages, *Chilo auriculus* 1217
 toxicity, *Bacillus sphaericus*, *Culex quinquefasciatus* 6603
 toxicity, *Bacillus thuringiensis*, *Bacillus cereus*, *Manduca sexta*, *Aedes aegypti* 4186
 toxicity, larvae, *Bacillus sphaericus*, *Culex pipiens quinquefasciatus* 6600
 toxicology, insecticides, benzoylphenyl urea, emergence, inhibition, eggs, *Tribolium castaneum* 3451
Toxothrypanus rufus rufus predators, *Aedes aegypti*, *Culex quinquefasciatus* 4579
Trialeurodes vaporariorum, parasites, *Encarsia formosa* 1424
 vegetables crop fields, *Epilachna varivertis*, *Pediosolus folvoratus* 2032
 weed control, aquatic plants, *Salvinia molesta*, *Cyrtogobus singularis* 5316
 weed control, *Carduus nutans*, *Rhynchosyris conicus*, *Ceutorhynchus horridus*, USA, North Dakota 2208
 weed control, *Carduus*, predators life history, *Ceutorhynchus trumaculatus*, *Trichosporus horridus* 1979
 weed control, defoliation, *Galeruca rufa*, *Convolvulus arvensis* 2944

Biological control, (continued)

- weed control, *Emex australis*, *Peripatium antiquum* 5205
 weed control, feeding, *Euzophera cinerosella*, *Artemisia absinthium* 7668
 weed control, galls, *Cirsium arvense*, *Urophora cardui*, Canada 3805
 weed control, historical account, *Chromolaena odorata*, *Paracraetichus pseudoinsulata* 6079
 weed control, introduced species, aquatic environment, *Eichhornia crassipes*, *Necotetia eichhorniae*, USA, Louisiana 1254
 weed control, introduced species, *Peripatium antiquum*, *Emex australis*, Australia 6078
 weed control, introduced species, *Ulex europaeus*, *Apion ulicis*, *Apion scutellare*, *Agonopterix ulicetella*, New Zealand 5335
 weed control, *Longitarsus alabunus*, *Heliotropium europaeum*, Australia 2950
 weed control, methodology, *Insecta* 1432
 weed control, natural enemies, *Heliconiidae*, *Passiflora mollissima*, USA, Hawaii 2947
 weed control, parasites, *Cordia curassavica*, *Metrogaleruca obscura*, *Eurytoma atriva*, Malaysia 2960
 weed control, *Rumex obtusifolius*, *Gastrophysa atrocyanea* 5985
 weed control, *Sameodes albiguttalis*, *Eichhornia crassipes*, USA, Florida 692
 weeds, *Cirsium arvense*, *Ceutorhynchus litura*, Canada, Ontario 2952
 weeds, environmental impact, *Cynara scolymus*, *Tinchostracalus horridus*, *Ceutorhynchus trimaculatus* 531

Biological properties,

- antifeedants, feeding behavior, herbivores, *Insecta* 8294
 correlation, segregation chromosomes, *Drosophila melanogaster* 3090

Biology

- adults, larvae, pupae, *Microdon fuscipennis* 2778
 behavior, apiculture, literature reviews, *Apis florea* 1436
 books, *Periplaneta americana* 5544
 borers, *Coleoptera*, *Lepidoptera* 3628
 Ceratopogonidae 815
 control programs, pests, conferences, *Atherigona soccata* 4496
 development, *Tribolium brevicornis* 3916
 developmental stages, controlled conditions, rearing, *Epilachna varivestis* 441
 developmental stages, *Platyptilia pica* 1727
 eggs, larvae, *Pleocoma*, USA, Oregon 6729
 geographical distribution, *Bruchida*, Turkey 1945
 geographical distribution, *Pompilus* 834
 Hister coenosus, *Hister incertus*, laboratories 1989
 host-parasite interactions, *Archipus semistriatus*, Japan 872
 immature stages, *Dioryctria taeda*, *Dioryctria taeda* 2503
 larvae, instars, *Pseudophilus includens* 1973
 life cycle, ecology, *Phenacoccus manihoti*, South America 440
 life history, reviews, *Phenacoccus manihoti*, Africa 1194
 Liodactylus leucogaster, feeding behavior, geographical distribution, laboratories 1969
 morphology, reviews, *Isoptera*, India 5427
 nesting behavior, nest building, *Tanyproctus monoduloides*, *Ammatopus icarioides* 1901
 nesting behavior, territorial behavior, males, *Oxybelus* species 1968
Ochetina bruchi, *Oxybelus crenatus*, host specificity, aquatic plants, Argentina 2053
 parasites, *Leiopteron uniformis*, rearing, hosts, *Lygus hesperus* 2022
 parasites, reviews, *Cuterebridae* 5912
 pests, *Saccharum officinale*, *Eldana saccharina*, Ivory Coast 2098
 predators, *Ceolophora quadrivittata*, *Coccus viridis*, New Caledonia 2774
 reproduction, comparison, plant hosts, *Phyllocnistis citrella* 551
Hyaphophila obscura 1981
Siphonurus demaryi 1632
 taxonomy, conferences *Insecta* 5542
 Telenomus californicus, parasites, eggs, *Orygia pseudosugata* 2014

Biomimetic,

- cells, enzymatic activity, ultrastructure, *Photuris* 995
 courtship, visual communication, neurophysiology, *Photuris lucicrescens* 5848
 enzymatic activity, kinetics, *Photuris* 5616
 mimicry, interspecific relationships, predation, *Photuris* 1303
 vision, eye, *Photinus pyralis* 132
 wavelength sensitivity, electroretinograms, compound eyes, *Photuris versicolor* 2540

Biomass,

- benthos, *Ephemeroptera*, *Diptera*, Venezuela, Valencia L. 621
 benthos, lakes, *Chironomidae*, New Zealand 7817
 community composition, forests, *Isopoda*, Nigeria 4460
 diurnal variations, grasslands, *Orthoptera*, USSR 9198
 food availability effects on, larvae, tree holes, *Aedes triseriatus* 4478
 food organisms, host plants predation effects on, *Misumena vatia* 457
 forests, *Araneida*, Czechoslovakia 613
 pollution effects, water pollution, streams, *Chironomidae*, Belgium, Antwerp 7810
 population dynamics, seasonal variations, forests, *Palomena prasina*, Czechoslovakia 1283
 seasonal variations, population dynamics, *Acrididae*, South Africa 8365
 stands, defoliation effects on, *Orygia pseudosugata*, *Coniferales*, USA, Idaho 3601
 turnover, habitat utilization, food, *Chorthippus parallelus* 7624

Bionomics,

- comparative studies, *Trichogramma* 1707
 cycles, sexual reproduction, *Anopheles darlingi*, Brazil 7527
 data analysis, graphic representation, population studies, *Apis mellifera* 7924
 morphology, geographical variations, *Diphlebia*, Australia 8044
 parasites, *Alectoris rufa*, *Cuculotaster heterographus* 8050
 parasites, *Colpocephalum heterotoma*, *Trinotum femoratum*, *Anaticola phoenicoperi*, *Anas platyrhynchos*, Spain 8336
 parasites, *Goniodes dispar*, *Menopon pallens*, *Cuculotaster heterographus*, *Cuculotaster heterogrammus*, *Goniodes colchici*, Spain, Cordoba 8045
 parasites, *Goniodes dispar*, Spain, Granada 8051
 polymorphism, larvae, castes, *Macrotermes michaelseni* 1708
 population studies, morphology, *Apis mellifera ligustica*, *Apis mellifera caucasica*, France 8058
 sexual reproduction, mating, oviposition, *Holotricha consanguinea* 7520
 wings, genetic control, development, *Drosophila* 3503

Biometry,

- morphology, castes, immatures, *Nasutitermes aequilinus*, Brazil 8869

Bionomics,

- abundance, annual variations, *Noctuidae*, Czechoslovakia 9182
Brachys tessellatus, life history, host plants, *Quercus laevis*, USA, Southeast

Bionomics, (continued)

- 1989
 companson, *Falsamblesithis ibyara*, *Falsamblesithis unguicularis*, Brazil 6357
 development, larvae, *Leptothrips mali* 8219
 geographical distribution, colonies, *Seritermes serifer* 6989
 habitat, marshes, *Hydrochara occulta*, *Hydrochara soror* 8281
 host plants, *Ophiomyia simplex*, *Asparagus officinalis*, USA, Massachusetts 6134
 host plants, *Saissetia hemisphaerica*, Cuba 9095
 host plants, *Wyomyia vanduzeei* 2075
 infestation, cattle, *Ctenocephalides felis orientis*, India 8427
 instars, *Simulium chutteni* 8880
 larvae, *Nectopsyche tava*, USA, Florida 6481
 life cycle, *Phlebotritus limmaris* 9115
 life cycle, predators, *Diadiplosis coci*, *Saissetia hemisphaerica* 9094
 life history, *Batocera lineolata*, Japan, Tokyo 5144
 life history, *Cryptorhynchus lapathi*, China, People's Rep., Liaoning Province 2780
 life history, parasitoids, *Euplectrus kuwane*, *Argyrogramma albostrata* 1223
 life history, streams, *Arcopsyche grandis*, USA, Idaho 5434
 morphology, *Trichogramma schuberti*, *Trichogramma rhenana*, France, Alsace 4876
 new species, taxonomy, *Phytophthorus pinsapo*, Spain 8763
 oviposition, reproductive behavior, *Stator pygidialis* 5102
Parthenolecanium corni, *Parthenolecanium wistarica*, British Isles 5908
 pests, *Dichrocercus punctiferalis* 6924
 pests, host plants, resistance, susceptibility, *Medicago sativa*, *Therioaphis trifolii* 7757
 pests, *Mangifera indica*, *Chumetia transversa*, India, Uttar Pradesh 6121
 pests, *Nilaparvata lugens* 5806
 phenology, *Atenius spretulus* 1867
 phenology, *Atenius spretulus*, life history, oviposition, flowering, soil temperature 1867
 population-environment relations, *Culiceta inornata*, USA, California 9221
 8 species, *Paracetes*, Oriental Region 6410
 systematics, *Histiini* 8766
 Tabanidae, Paraguay 7125
 telamona monticola, USA, Delaware 9112
- Biophysics,**
 control programs, reviews, *Termitidae* 738
- Blossays,**
 insecticides, field trials, electronic equipment, incubation, *Lygus hesperus*, *Acyrtosiphon pisum* 8015
- Bioesters longicaudatus,**
 parasites, diflubenzuron effects on development, *Anastrepha suspensa* 357
 parasites, population density, oviposition, host selection, competition 2028
 parasitoids, development, hosts physiology effects on, *Anastrepha suspensa* 9135
- Bioesters melles,**
 parasitism, pupae, *Rhagoletis pomonella*, USA, Connecticut 2819
- Biosynthesis,**
 N-acetyldopamine, nervous system, *Schistocerca gregaria* 1734
 chitin, epidermis, molting, *Lithobius forficatus* 5657
 chitin, epidermis, *Plodia interpunctella*, *Galleria mellonella* 2516
 chitin, inhibition, antibiotics, tunicamycin, *Triatoma infestans* 6587
 chitin, toxicity, diflubenzuron, penfurin, *Chironomus trachypetens* 6620
 corpora allata, juvenile hormones radioisotopes, farnesic acid stimulation, *Diptera punctata* 208
 defense secretions, *Nasutitermes octopilis* 253
 drosoprotein, pigments, eye, biochemical analysis, *Drosophila melanogaster* 3325
 ecdysteroids, ovary, growth regulators, azadirachtin, effects on, *Locusta migratoria* 377
 gene expression, sex determination, *Chrysomya rufifacies* 758
 glycerol, diapause, *Chilo suppressalis* 3482
 heat shock proteins, developmental stages, *Drosophila melanogaster* 5686
 hydrocarbons, *Periplaneta americana* 954
 hysteresis proteins, biochemical analysis, hemolymph, *Oncopeltus fasciatus* 1756
 juvenile hormones, accessory gland, males, *Hyalophora cecropia* 968
 juvenile hormones, corpora allata ablation effects on, *Diptera punctata* 2580
 juvenile hormones, corpora allata, *Locusta migratoria* 2590
 juvenile hormones, corpora allata, vitellogenesis, *Locusta migratoria* 2714
 juvenile hormones, inhibition, biotrichocarbamate juvenoid, *Manduca sexta* 5714
 juvenile hormones, precocene effects on, *Diptera punctata* 1771
 juvenile hormones, sexual maturity, ovary, *Locusta migratoria* 4278
 linoleic acid, *Periplaneta americana*, *Zootermopsis angusticollis*, *Acheta domestica* 6504
 lipophorin, fat body, vitellogenin, *Locusta migratoria* 3330
 mercapturic acid, phenobarbitone effects on, *Musca domestica* 3432
 milk, juvenile hormones effects on, *Diptera punctata* 2589
 octopamine, ganglia, *Locusta migratoria* 2524
 organic compounds, sex pheromone, (Z)-9-tricosene, *Musca domestica* 229
 juvenile hormones, digestive tract, *Ips parvifrons* 1786
 pheromones, juvenile hormones effects on, *Dendroctonus frontalis* 5700
 pheromones, localization, fat body, *Anthrenus grandis* 4167
 pheromones, precursors exposure, *Ips parvifrons* 1784
 pheromones, streptomycin effects on, *Ips parvifrons* 3352
 pigments, genetic control, enzymatic activity, *Drosophila melanogaster* 3907
 respiratory pigments, corpora cardiaca, hormones, *Blaberus discoidalis* 1774
 septapierin, intermediates purification, *Drosophila* 8951
 sex pheromone, mating effects on, host plants aggregation, *Ips parvifrons* 3539
 sex pheromone, pheromone emission, males response, *Brachymeria lasus* 2754
 steroids, reproductive systems, *Periplaneta americana* 6655
 taurine, metamorphosis, pupae, *Maemstra configurata* 389
 vitamin B₆, gastrointestinal tract, larvae, *Phoracantha semipunctata* 941
 vitellogenin, vitellin, fat body, *Calliphora erythrocephala* 6550
- Biotoxes,**
 sex differences, heavy metals bioaccumulation, rivers, *Dytiscidae*, USSR 5436
- Biotypes,**
 disease resistance, susceptibility, pathogens, *Erynia neophidis*, *Acyrtosiphon pisum* 8128
 fecundity, development, effects on host plants, *Nilaparvata lugens* 1288
 food preferences, genetics, selection, *Nilaparvata lugens* 2340
 geographical distribution, mathematical models, development, emergence, *Heliothis zea*, USA 2695
 hybridization, genetics, pests, *Nilaparvata lugens* 5489
 pests, *Nephotettix cinctipes*, Japan 2297
 pests, population studies, population genetics, *Nilaparvata lugens* 3604
 population dynamics, life history, comparison, *Simulium*, USA, California 3866
 surveys, *Triticum crop fields*, *Schizaphis graminum*, USA, Texas 3761

Subject Index

- Biotyping**,
revision, taxonomy, *Polypedium* 3198.
- Riphenyl**,
repellents, pest control, *Dysdercus koenigii* 7340.
- Birds**,
ectoparasites, geographical distribution, Arthropoda, USA, Alaska 520.
parasites, geographical distribution, Eryenidae, USA, Hawaii 795
- Birmala taiwanensis**,
taxonomy, new species, morphology, geographical distribution, new records, Taiwan 2447
- Bistholcarbamate juvenoid**,
inhibition, juvenile hormones, biosynthesis, *Manduca sexta* 5714.
- Biston cognataria**,
melanism, population studies, coloration, USA, Pennsylvania 1579.
- Bites**,
attachment sites, histamine, guinea-pigs, *Dermacentor andersoni* 6069
history, case reports, domestic animals, *Dermacentor* 4488
hypersensitivity, man, *Triatoma infestans*, *Diputogaster maxima* 1375
hypersensitivity, Siphonaptera, *Canis familiaris* 2910.
medical importance, Chitopoda, Diplopoda, Switzerland 641.
medical importance, man, Arthropoda, USA, Georgia, Ft. Stewart 6886.
medical importance, *Palystes natalius* 645.
new records, immune response, neurological complications, man, *Ixodidae* 8411
pests, man, *Leptocentrus torrens*, USA, California 8430.
stings, medical importance, treatment, *Latreutes mactans*, *Loxosceles reclusa*.
Chiracanthum 627
stings, treatment, medical importance, *Scorpiones*, *Reduvius* 629
symptoms, therapy, *Arachnida* 668
venom, medical importance, *Araneae*, Europe 5287.
venom, treatment, *Latreutes* 1319.
- Blinding**,
blood meals, man, *Anopheles triannulatus bachmanni*, Brazil 4354.
cycles, blood meals, *Culex quinquefasciatus*, Thailand, Bangkok 6060
- Biting behavior**,
host searching behavior, effects on hosts coloration, *Diptera*, *Equus zebra* 2130.
seasonal variations, diurnal variations, Simuliidae, Guatemala 659.
- Blister principle**,
repellents, mimicry, *Meliorhynchus rhipidius* 1785.
- Blaber craniifer**,
regeneration, supernumerary antennae 7430.
- Blaber craniifer**,
bones cell surface, antigenic characteristics, comparative studies 100.
- Blaberus discoidalis**,
dieldrin acute toxicity, toxicity 301.
respiratory pigments, biosynthesis, hormones, fat body, biochemical analysis 1774.
- Blaberus discoidalis**,
insecticides, sesamex, dieldrin, toxicity, ganglia, electrophysiological recording 5778.
- Blaberus fuscus**,
calcium uptake, sarcoplasmic reticulum, muscles 112.
cuticle growth synchronization, molting rhythms 8899
muscles, enzymatic activity, temperature effects 2577.
- Blaberus giganteus**,
electrical properties, physiology, piezoelectricity, pyroelectricity, integument 8966.
- Blaesoxipha**,
mortality, predation effects on, parasites, *Melanoplus sanguinipes* 6027
- Blankaartia amersoni**,
parasites, marine organisms 9
- Blaps abdita**,
taxonomy, synonymy, *Blaps lethifera* 8770
- Blaps lethifera**,
taxonomy, synonymy, *Blaps abdita* 8770
- Blaste hilaris**,
taxonomy, morphology, Spain 4908
- Blasivulva**,
cell division, embryogenesis, *Drosophila* 3461
cells, embryogenesis, *Drosophila* 2670
determination, metameric pattern, embryogenesis, reviews, *Drosophila* 4246
- Blasphogloss piniperda**,
pest control, forests, food plants, *Pinus sylvestris*, *Pinus pallasiensis* 7690
- Blattella**,
males, genitalia, morphology 804
- Blattella asahinai**,
new species, morphology, Okinawa 804
- Blattella germanica**,
trapping, baits efficacy 9335
traps, efficacy 5352
- Blattia germanica**,
host plants, host-parasite interactions, host specificity, *Testastrichus* hagenowii 504
- Blatta orientalis**,
activity patterns, circadian rhythms, environmental effects 9079
host plants, host-parasite interactions, host specificity, *Testastrichus* hagenowii 504
laboratory animals, books 6336
- Blattaria**,
abundance, seasonal variations, Panama 2890
midgut endocrine system cells, ultrastructure 101
paleoecology, Upper Carboniferous, USA, Pennsylvania 2376
- Blattella germanica**,
aggregation pheromone, dispersion pheromones, effects on larvae, intraspecific relationships 1161
antennal sensilla, morphology, distribution 905
attractancy, methylcyclohexanol 2593
attractancy, propyl cyclohexanecarboxylate, deuteration 3734
bait, toxicity, boric acid, iodofenphos gel 5776
laboratory animals, books 6336
larvae development, body size regulation 2720
malpighian tubules, ultrastructure, segments, comparison, *Tenebrio molitor* 6548
mating behavior, xenic organs effects on 2744
pest control, alkyl methylcyclohexanecarboxylate isomers, attractancy 3831
pest control, chemical control, chlorpyrifos 8557
pest control, chemical control, hoses 3789
pesticide resistance, cross-resistance, insecticides, DDT, permethrin 5049
- Blattella germanica**, (continued)
pests movements, buildings, urban environments 8436
population dynamics, fecundity, kitchens, houses, USA, North Carolina 6032.
population levels, population structure, estimation, ships 2162.
spatial distribution, urban environments, houses, USA, Virginia 3645.
toxicity, sterility, trichlorfon, juvenile hormones analogs 1829.
trapping efficacy, food sources effects on 3248
- Blattidae**,
census methodology, urban environments 8858
keys, morphology, taxonomy 7273.
pest control, methodology 9288
pests, houses, surveys, Thailand 6066.
Salmonella isolation, public health, India 6076.
swimming behavior, environmental effects 9047.
- Blattisocius tarsalis**,
pest control, stored products, *Ephestia cautella* 2955
- Blattodea**,
excretory products, uric acid, comparative studies 928
growth, development, neurons, retina 898
growth, development, ommatidia, compound eyes 141.
heterogeneity, juvenile hormones, binding, fat body 209.
- Bledionotinae**,
check lists, geographical distribution 825
- Bledius klapperi**,
new species, Iran 3187
- Bledius yemenicus**,
new species, Yemen 3187
- Blennocampinae**,
check lists, species composition, Europe, Carpathian Basin 8682
- Bleomycin**,
use, clastogenicity methodology, embryos, *Chortophaga viridifasciata* 9412.
- Blimus insularis**,
pest resistance, host plants, varieties, hybrids, *Stomatoporus secundatum* 8556
pesticide resistance, insecticides, chlorpyrifos 8191
- Blimus leucopertus**,
development rearing, survival 65
pest resistance, biochemistry, *Sorghum bicolor* 4564
pest resistance, crops, bentability, *Pennisetum americanum* 4638
pest resistance, feeding tolerance, *Poa pratensis* 1399
reproduction, development, oviposition, longevity, effects on, grasses, damage, photoperiods 536
- Blimus leucopertus leucopertus**,
host plants pest resistance, inheritance, genetic factors, *Pennisetum americanum* 8460
insecticides, efficacy, mortality 5771
insecticides, efficacy, toxicity 9024
- Blood**,
defense secretions, defense mechanisms, *Gallerucida nigromaculata* 7528.
hemoglobin, biochemical analysis, *Chironomus thummi thummi* 3306
parasites, hematology, *Bubalus bubalis*, *Haematoporus tuberculatus*, India 5280
viruses, characterization, isolation, *Ceratomyces trifurcata*, *Diabrotica undecimpunctata* 1824
- Blood cells**,
classification systems, hematology, *Nepa cinerea* 99
hemolymph, ultrastructure, phagocytosis, *Drosophila melanogaster*, *Drosophila yakuba* 2542
pathology, infection, *Bacillus popilliae*, *Anomala corpulenta*, *Holotricha obita* 2640
- Blood coagulation**,
venom effects on, rabbits, man, *Loxosceles laeta* 8195
- Blood flow**,
thermoregulation, ecophysiology, *Sarcophaga* 6580.
- Blood meals**,
accessory gland, reproduction role, spermatogenesis, *Stomoxys calcitrans* 8241.
age, growth, *Amblyomma americanum* 4508
Anaplasma marginale transmission, cattle, Arthropoda 7628.
attachment, larvae, cattle, *Amblyomma americanum* 8339
biting cycles, *Culex quinquefasciatus*, Thailand, Bangkok 6060
biting, man, *Anopheles manuilatus bachmanni*, Brazil 4354
body weight, egg production, *Dermacentor silvarum*, China, People's Rep. 2704.
capture-recapture studies, autogeny, feeding, oviposition, *Culex tarsalis* 6745.
chemical stimuli, ATP, nucleotides, *Rhodnius prolixus* 5930
Chrysops hirsuticallus, USA, California, Mendocino Co. 5146
development, reproductive systems, *Mansonia richiardi* 9058
digestion, response, midgut, epithelium, cells, *Culex tarsalis* 6547.
disease transmission, veneralian equine encephalitis virus, *Aedes aegypti* 4504
effects on ovary development, *Stomoxys calcitrans* 3497.
egg production, body weight, *Ixodes ricinus*, Ireland 1126.
egg production, oviposition, *Rhipicephalus sanguineus* 8256
estradiol binding, aging methods, hosts, *Rodentia*, *Culicidae* 6888
exocrine glands, histology, *Rhipicephalus erici* everti 3378
faeces, digestive tract, *Toxonychus rutilis* 922
feeding behavior, *Aedes aegypti*, *Rodentia* 5160
feeding behavior, *Heterodonta spiniger* 9123.
feeding behavior, malaria vectors, *Anopheles dirus* 6063
feeding behavior, man, *Xenopsylla gergili minax*, *Xenopsylla conformis* 9124.
feeding behavior, surveys, 15 families, *Diptera*, Sweden 4351.
feeding, diapause, overwintering, *Culex tarsalis* 3570.
feeding, mating effects on, *Glossina austeni* 8229
feeding, methodology, equipment, *Culicoides* 3242
fluids excretion, *Aedes aegypti* 2798
growth, follicles, *Stomoxys calcitrans* 9051
hormones, vitellogenesis, *Culicidae* 5083
host preferences, *Culicoides*, Zimbabwe 1997
host preferences, genetic variance, *Anopheles culicifacies*, Sri Lanka 9430.
host preferences, *Hemaphysalis punctata*, Netherlands, Texel I. 4388
host searching behavior, gonotrophic cycles, age, *Leptocrocoptus carteri* 8291.
host searching behavior, vitellogenesis effects on, *Aedes aegypti* 2807.
hosts, domestic animals, females, *Phorophora columbica*, USA, Texas 6074
hosts, *Glossina morsitans* submoritans, *Glossina palpalis gambiensi*, Mali 9126.
hosts identification, complement fixation, *Glossina morsitans* 2011.
hosts, *Mammalia*, *Culicidae*, *Chironomidae*, Australia, Northern Territory 3678.
identification, enzyme-linked immunosorbent assay, *Culicidae* 3662
infection rates, *Trypanosoma vivax*, *Glossina morsitans*, *Glossina morsitans centralis* 8408
infestation, mortality, *Aedes sollicitans*, Bos indicus, USA, Texas 3660

Blood meals, (continued)

- life cycle, reproduction, *Aedes cataphylla* 6712.
 man, species identification, enzymes 7326.
 marking methodology, radiosotopes, *Phlebotomus* 6669.
 methodology, sterilization, *Glossina morsitans morsitans* 8845.
 midgut, enzyme activity, *Haemaphysalis urticae*, *Stomoxys calcitrans* 5676.
 neuroendocrine system, oogenesis, *Aedes aegypti*, *Aedes taeniorhynchus* 5832.
 oogenesis, age, *Culex* 9059.
 osmotic pressure effects on osmoregulation, *Ornithodoros moubata* 231.
 pest control, repellents, efficacy, *Aethrotopa* 8965.
 protein composition, digestive tract, immunology, *Dermacentor andersoni* 4997.
 protobiont pigment, hemolymph, body fluids, *Argas arboreus* 6540.
 saliva, anti-hemostatic components, activity, *Thrombosane A2*, *Rhodnius prolixus* 7361.
 simulation, rearing, *Triatoma infestans* 2002.
 size, sex differentiation, *Cimex hemipterus*, measuring techniques 1702.

Blood sucking,

- feeding, olfaction sensilla, Diptera, *Phlebotomus* 2532.
 Insecta, feeding apparatus, design 1700.

Blood-brain barrier,

- ultrastructure, central nervous system, *Scorpionida* 902.

Blueberry shoestring virus,

- disease control, vectors, insecticides, *Ilinoia pepper* 4630.

- vectors, chemical control, insecticides, *Ilinoia pepper* 8458.

Bluetongue virus,

- disease control, vectors, *Culicoides varipennis* 4510.
 infection, *Culicoides puncticollis* 3413.
 isolation, abundance, *Culicoides*, Zimbabwe, Mukwadzi Valley 9228.
 susceptibility, infection, *Phlebotomus papatasi* 3412.
 vectors, chemical control, ozone fumigation, biological safety cabinets, *Culicoides varipennis* 8477.
 vectors, disease control, fumigation, ozone, *Culicoides varipennis* 4519.

Blumea ciliartha,

- oil vapors, effects on reproduction, *Earias vittella* 7454.

Bombus melanarius,

- biological control, parasites, pathogens, pests, *Persea americana*, Israel 5390.
 pests, bibliographies 6213.

Bohartia,

- range extension, geographical distribution, USA, Texas 3171.

Bohartia shirleyanae,

- new species, taxonomy, morphology, USA, Texas 3171.

Body,

- movements, mating behavior, *Apanteles glomeratus* 7487.
 sterols, biochemical analysis, identification, *Atta cephalotes* *isthmica* 5690.

Body fluids,

- biochemical characteristics, reviews, *Ixodidae* 8939.
 protobiont pigment, *Argas arboreus* 6540.

Body length,

- allatostictosis, *Drosophila melanogaster* 5803.
 correlation analysis, body weight, energy content, *Palomena prasina* 51.
 developmental genetics, enzymes, electrophoresis, *Tabanus nigrovittatus* 2336.
 developmental stages identification, *Phasmoda* 6494.
 mycotoxins, effects on, *Drosophila melanogaster* 4212.

Body measurements,

- head, diets, effects on, larvae, *Bactra verutana* 380.

Body organs,

- excretory systems, ultrastructure, *Peripatus acacioi* 4151.

Body size,

- allometry, *Culicoides* 2506.
 allometry, males, *Anisoptera* 3261.
 case construction, habitat, geographical distribution, freshwater environments, *Limnephilidae* 7807.
 climbing, emergence, larvae, *Luciola cruciata*, Japan, Kiyotaki R. 3861.
 colonies, temperature effects on, *Erylaeus calceatus* 5078.
 competition, coexistence, caves, effects on, *Pseudonophthalmus menetriesi*.
Pseudonophthalmus pubescens 1488.
 development, *Tribolium freemani* 8217.
 discrimination, mate selection, courtship, *Pieris protodice* 4297.

Effects on

- effects on, copulation, breeding success, strains 2747.
 effects on flight activity, *Anisoptera* 3276.
 effects on metamorphosis, life history, *Oncopeltus* 1956.
 effects on molting, *Heliconius melpomene* 1110.
 effects on workers egg laying, *Bombus terrestris* 469.
 energy output, fecundity, females, *Sceliphron assimile* 1075.
 fecundity, temperature, salinity effects on, *Aedes dorsalis* 8223.
 female, effects on, nest building, oviposition, *Dendroctonus frontalis* 1879.
 females, effects on fecundity, *Anopheles messeae* 324.
 hosts, effects on parasitoids reproductive strategy, sex ratio, *Heterospilis prusipidis* 7538.

- hosts, egg laying, sex determination, *Pimplinae* 7471.
 males, sexual reproduction, selection, *Lepidoptera* 4326.
 mate selection, breeding success, *Tetraops tetratholpalmus* 4298.
 mate selection, sexual selection, *Brentus anthracorago* 6658.
 metamorphosis, photoperiod, *Labidomera ciclicivolis* 5087.
 metamorphosis, larvae, pupae, *Simulium chutteri* 8880.
 pesticide resistance, DDT, *Culex quinquefasciatus* 5770.
 polymorphism, colonial characteristics, *Solenopsis invicta* 2275.
 regulation, larvae development, *Blattella germanica* 2720.
 sex differences, parasitoids, *Trichogramma minutum* 8323.
 sexual dimorphism, pupae, adults, *Sesamia inferens* 863.

Body temperature,

- activity patterns, diel variations, seasonal variations, weather, *Tenebrionidae*.
 USA, Washington 8274.
 thermoregulatory behavior, *Euphydryas aurina* 6703.
 thermoregulatory behavior, *Lepidoptera decemlineata* 5705.
 thermoregulatory behavior, orientation, sunlight, *Gynaephora rossii* 5906.
 thermoregulatory behavior, *Xanthocheilus zelandica*, *Austrolepis colensois*, *Procladia smithii*, New Zealand 6701.

Body weight,

- blood meals, egg production, *Dermacentor silvarum*, China, People's Rep. 2704.
 correlation analysis, body length, energy content, *Palomena prasina* 51.
 development, diets, larvae, pupae, *Heliothis virescens*, *Diatraea saccharalis* 1750.
 development, *Tribolium freemani* 8217.
 diets effects on, nutrient sources, proteins, sucrose, *Anthonomus grandis grandis*

Body weight, (continued)

8276.
 effects on homosexual behavior, males, *Palmarcorix nana* 1892.
 effects on lethal dose, toxicity testing, insecticides, statistical analysis, *Chonstoneura occidentalis* 8207.
 effects on metabolic rate, *Hydropsyche venularis* 4172.
 egg production, blood meals, *Ixodes ricinus*, Ireland 1126.
 estimation, workers, swarms, population studies, *Apis mellifera* 8027.
 fat metabolism, water balance, molting, *Nauphoeta cinerea* 7324.
 fecundity, maternal behavior, nest building, *Sceliphron assimile* 1905.
 genetic variance, genotype-environment interactions, *Alaphila pomatoria* 8664.
 host-parasite interactions, *Galleria mellonella*, *Gonia cinerascens* 2825.
 hosts, parasitism, *Galleria mellonella*, *Gonia cinerascens* 2827.
 hosts, parasitism, pupae, *Galleria mellonella*, *Gonia cinerascens* 2822.
 larvae, parasitism effects on, *Gonia cinerascens*, *Galleria mellonella* 6766.
 Larvae, *Pericallia ricini*, viruses, pathology, granulosis virus, infection 1805.
 parasitism effects on, *Gonia cinerascens*, *Galleria mellonella* 6765.
 pathogens, biological control, larvae, *Bacillus thuringiensis*, *Achoea janata* 2644.
 rabbits, parasites effects on, *Amblyomma hebraeum* 673.
 seasonal variations, dormancy, *Scymnoides lividigaster*, *Leptothoe galbula*, Australia 3327.
 toxicity, insecticides, diflubenzuron, *Hypera postica* 7420.
- Boettcheria peregrina,**
 morphology, immature stages, Australia 2504.
- Bogs,**
 ecological distribution, species composition, *Lepidoptera*, Switzerland 6874.
 environmental conditions, species diversity, *Chironomidae*, Eire 7806.
 life cycle, phenology, *Chaoborus*, USA, Michigan 7015.
 peatlands, occurrence, *Microlepidoptera*, Czechoslovakia 9481.
 sub-polar environments, habitat selection, spatial distribution, *Aedes*, Canada, Quebec 6043.
- Bolethrips,**
 synonymy, *Frankliniella* 3233.
- Bolophilidae,**
 larvae, association, fruit bodies, fungi 538.
- Bolivia,**
 genes, isoenzymes, genetics, *Triatoma infestans* 4668.
 new records, geographical distribution, *Claoderes mexicanus*, *Cephaloborus macrocephalus* 7157.
 new species, *Polana protochuela*, *Polana innata*, *Polana pravada*, *Polana bitubera*, *Polana tubera*, *Polana ovata* 5585.
 new species, taxonomy, morphology, *Gypona* 2440.
 new species, taxonomy, morphology, *Polana protochuela*, *Polana innata*, *Polana pravada*, *Polana bitubera*, *Polana tubera*, *Polana ovata* 8809.
 oviposition, egg-throwing, trees, *Mecistogaster jocaste* 6677.
 population studies, comparison, isoenzymes, genes, *Triatoma infestans* 4692.
- Bombidae,**
 community structure, core species, satellite species, abundance, distribution, species richness 8377.
 conditioning, recognition, flower-guides, stamens 7501.
 pollinators, competition, food sources, food availability 6822.
 pollinators, foraging behavior, *Aralia hispida* 8346.
- Bombus,**
 abundance, species composition, Poland, Pulawy 9476.
 community composition, food sources, availability, Finland 4476.
 community structure, competition, niche partitioning, USA, Colorado 4469.
 community structure, species composition, Europe, North 6830.
 ecological distribution, geographical distribution, Iceland 786.
 food organisms, predation, *Misumena vatia* 457.
 foraging behavior, *Aconitum columbianum* flowers, energy intake optimization, USA, Rocky Mts. 4345.
 foraging behavior, entomology, pollen, *Helianthus annuus* 6735.
 foraging behavior, flowers, interspecific relationships, *Syrphidae* 2115.
 foraging behavior, pollination, mutualism, *Asclepias syriaca* 2050.
 foraging behavior, pollinators, mathematical models, *Digitalis purpurea* 5920.
 interspecific relationships, pollination, dispersion, *Pedicularis*, USA, Alaska, Alaska 4404.
 phylogeny, enzymes, electrophoresis 4700.
 pollination, flowering, *Fraseria carolinensis* 6791.
 pollination, host plants, flowering phenology, community structure 1258.
 pollinators, feeding behavior effects on flowers color, *Delphinium nelsoni* 1291.
 pollinators, foraging behavior, coevolution, *Trifolium pratense* 5195.
 pollina retention, interspecific relationships, pollination, outcrossing, *Asclepias syriaca* 6780.
 population density, host plants habitat effects on, pollination 3598.
 proboscis, functional morphology, glossa length 8895.
 resource utilization, foraging behavior, niche breadth, pollen, Sweden 4480.
- Bombus appositus,**
 cuticles, chemical composition, organic compounds, USA, Colorado 107.
 feeding behavior, nectar standing crop effects on, *Delphinium nelsoni* 495.
 foraging behavior, *Aconitum columbianum* flowers, energy intake optimization, USA, Rocky Mts. 4345.
- Bombus atratus,**
 cocoons, case construction, composition 8982.
- Bombus bifarius,**
 pollinators, foraging behavior, plasticity 6736.
- Bombus bimaculatus,**
 population density, pollination, host plants, *Zenobia* 3598.
- Bombus edwardsii,**
 foraging behavior, continuous reinforcement, flowers 3543.
- Bombus fervidus,**
 cross-pollination, flowers, efficiency, *Solanum tuberosum* 1285.
- Bombus flavifrons,**
 foraging behavior, *Aconitum columbianum* flowers, energy intake optimization, USA, Rocky Mts. 4345.
 pollinators, foraging behavior, plasticity 6736.
- Bombus griseocollis,**
 population density, pollination, host plants, *Zenobia* 3598.
- Bombus hortorum,**
 geographical distribution, new records, Iceland 786.
- Bombus hortorum,**
 visual perception, eye, histology, physiology 904.
- Bombus impatiens,**
 cross-pollination, flowers, efficiency, *Solanum tuberosum* 1285.
 population density, host plants habitat effects on, pollination 3598.

- Bombus jonellus**, ecological distribution, Iceland 786.
- Bombus lapidarius**, foraging behavior, food sources, niche pattern 6835.
- Bombus lapponicus**, morphology, taxonomy 4871.
- Bombus lucorum**, geographical distribution, new records, Iceland 786.
- Bombus monticola**, morphology, taxonomy 4871.
- Bombus occidentalis**, cuticles, chemical composition, organic compounds, USA, Colorado 107.
- Bombus perplexus**, colonial characteristics, population structure, workers, males, queens 9366.
- Bombus sandersoni**, foraging behavior, nectar reinforcement effects on 2049.
- Bombus terrestris**, colonial characteristics, larvae feeding, workers 749 colonies, parasitism, oviposition, *Pristiphora vestalis* 4376. colonies, social behavior, dominance, castes 5419. effects on workers egg laying behavior 469. foraging behavior, food sources, niche pattern 6835.
- Bombus terrestris**, colonial characteristics, larvae feeding, workers 749. foraging behavior, flowers, interspecific relationships, *Syrphidae* 2115. foraging behavior, pollination, mutualism, *Asclepias syriaca* 2050.
- Bombus vagans**, foraging behavior, flowers, interspecific relationships, *Syrphidae* 2115. foraging behavior, pollination, mutualism, *Asclepias syriaca* 2050.
- Bombus vosnesenskii**, chemical communication, scent marking behavior, flowers, foraging behavior 1925.
- Bombylidae**, developmental stages, morphology 77. museum collections, taxonomy, morphology 8783.
- Bombylius albicapillus**, taxonomy, synonymy, *Bombylius heximaculatus* 1622.
- Bombylius californicus**, taxonomy, new species, *Bombylius heximaculatus* 1622.
- Bombylius halli**, taxonomy, new species, *Bombylius heximaculatus* 1622.
- Bombylius heximaculatus**, taxonomy, synonymy, *Bombylius albicapillus* 1622.
- Bombylius major**, pollinators, *Claytonia virginica*, USA, North Carolina 2065.
- Bombylius valticus**, taxonomy, new species, *Bombylius heximaculatus* 1622.
- Bombyx**, comparison, rRNA 5S, nucleotide sequence, *Acyrtosiphon magnoliae* 4686. eggs, diapause, hormones 2678.
- Bombyx mori**, β -N-acetyl-D-glucosaminidase, chitinase, purification, characterization, integument, hemolymph 7282. aging, effects on metabolism, amino acids 4236. antifeedants, feeding stimuli, plant extracts, phenolics, *Morus* 7529. bioaccumulation, molting hormones, steroids, ovary 210. cell culture ovary infests 874. cells, neurosecretion, pars intercerebralis, distribution, monoamine neurons, brain 3279. chorion genes, cDNA nucleotide sequence, proteins, evolution 8630. chorion proteins, genes, evolution 4666. chorion proteins, translation, mRNA, microinjection, oocytes *Xenopus laevis*, cDNA hybridization analysis 8083. clones, genes, chorion loci 6254. cocoons, enzymatic activity, carbohydrate metabolism 2561. cocoons, physical properties, breeding, selection 9427. cocoons, physical properties, correlation, selection, breeding 9432. development, ultrastructure, muscles, nuclei 7281. diapause, eggs, hormones, metabolism 3474. diapause eggs, protein composition, lines 9420. diapause eggs, 20-hydroxyecdysone effects on development 2675. disease transmission, nuclear polyhedrosis virus, *Anticarsia gemmatilis* 277. diseases, densovirus-like virus, reviews 8988. cDNA clones, chorion genes, developmental stages 6249. ecdysteroids, ovaries, development, endocrine system 4162. eggs, hatchability, temperature effects on 6652. fat body, development, enzymatic activity 3509. fibroin crystals, structure, silk 5719. fibroin transport, secretion, silk gland 3376. genes, promoters region, location, fibroin 4663. giant neuropeptides, ultrastructure 3267. growth, development, diets, cholesterol effects on 2690. hemolymph, cations, variation, diets, developmental stages 5673. hemolymph, cells, binding, foreign bodies 4148. hormones, melanization, coloration 3360. indicator species, brain hormones bioassays, methodology 7330. infection, nuclear polyhedrosis virus, nucleic acids, abdomen 3418. infection susceptibility, densovirus-like virus, population genetics 2351. juvenile hormones control, storage protein biosynthesis, fat body uptake 2726. larvae, β -glucosyl-O-tyrosine, hemolymph 2563. larvae, amino acids, nutrition, growth, hemolymph 2709. larvae, gut, contraction rhythms 2549. larvae, pesticides (organophosphorus), parathion, disulfoton, bioaccumulation, toxicity 2663. larvae, protein biosynthesis, digestive tract 959. metabolism, amino acids, m-toyl-N-methylcarbamate, effects on oxidation, phenylalanine, tyrosine 7317. metamorphosis, effects on proteins, DNA, RNA 952. metamorphosis, hemolymph protease inhibitors 7478. midgut, muscles, anatomy, histology 2550. molting hormones, embryogenesis, diapause 3463. molting, larvae, ecdysteroids effects on 2722. mutants, genotypes, coloration 9417. mutation, development duration 7856. mycosis, chemical control, fungicides, *Beauveria* 6154. nuclear polyhedrosis virus infection, DNA biosynthesis, RNA biosynthesis 3398. nuclear polyhedrosis virus infection, temperature effects on 1821.
- Bombyx mori**, (continued) nuclear polyhedrosis virus replication, abdomen, *Bombyx mori* 5033. nucleotide sequence, DNA, duplication, hybridization 4661. phototaxis suppression, host plants olfactory stimuli effects on 3300. plasma proteins, amino acid composition, fat body mRNA protein biosynthesis 3913. poly(A)-containing mRNA, purification, protein biosynthesis, fibroin, silk gland 8979. polyploidization, temperature effects 1520. polyploids, development, ovary, larvae, histology 1087. population genetics, genetic variance, cocoons 9428. potassium iodide ingestion, effects on growth, egg production 6649. proteinase, biochemical analysis 4993. proteins, chorion, conformational analysis, Raman spectroscopy 5825. pupae abdomen, nuclear polyhedrosis virus effects on metabolism 284. pupae, brain cells, neurosecretion, ultrastructure 991. pupae, glycolipid composition, phospholipid composition 166. pupae, susceptibility, parasites, *Neoplectanella carposcapae* 3406. rearing, artificial diets, proteins, *Spilina platensis* 3239. regulation rRNA biosynthesis 8084. retinol deficiency effects on phototaxis, photosensitivity 2767. rRNA nucleotide sequence, silk gland 2306. rRNA 5S, secondary structure 3914. silk gland, gene expression, mRNA poly(A) containing, cDNA hybridization, larvae 8112. silk gland, glycogen, cyanocobalamin, cobalt chloride effects on 6585. silk gland, lipid composition, cyanocobalamin, cobalt chloride effects on 6588. silk gland, rRNA 5.8S, nucleotide sequence, secondary structure 4177. spermatocytes, synaptonemal complex attachment sites chromosomes 9406. storage proteins, vitellogenin, bioaccumulation, development, developmental stages 3498. strains, hybrids, silk glands, weight, cocoons 6963. susceptibility, pathogens, *Beauveria bassiana*, *Nomuraea rileyi* 8130. temperature, hemolymph: effects on adherence, filopodium elongation, leukocytes (granulocyte) 8073. tetraploidy, eggs size 3088. tyrosine metabolism, bioaccumulation, metabolites, hemolymph 2570.
- Bones**, cell surface antigenic characteristics, comparative studies, *Blaberus craniifer* 100. feeding behavior, *Coprophanaeus telamon* 497.
- Bonnetia comata**, parasites, rearing methodology 6478. parasitism, effects on hosts survival, *Agrotis ipsilon* 6753.
- Books**, autecology, pests, crops, Leguminosae, *Bruchidae* 8707. bibliographies, *Pieris brassicae* 8710. biological control, predator-prey interactions, *Tetranychus urticae*, *Phytoseiulus persimilis*, *Amblyseius potentillae*, *Amblyseius hibens*, *Metaseiulus occidentalis* 8709. biology, *Periplaneta americana* 5544. cells, differentiation, control, *Insecta* 8711. laboratory animals, *Periplaneta americana*, *Blatta orientalis*, *Blattella germanica* 6336. parasites, autecology, *Insecta* 8708. pathogenesis, diseases, *Insecta* 7920. pests, crop fields, *Insecta*, Indonesia 5543. systematics, phylogeny, *Eucolidae* 8712.
- Boophilus**, pest control, chemical control, coumaphos 8531.
- Boophilus annulatus**, *Boophilus microplus*, hybridization, sterility, offspring 3112. parasites, oviposition, timing, seasonal variations, cattle 1916. pest control, acaricides, coumaphos, Bay Vb 9328 Flowable, cattle 4509. pest control, chemical control, coumaphos 8531.
- Boophilus decoloratus**, abundance, surveys, Botswana 3672. chemical control, diacis transmission, chemosterilants, imidacarp dipropionate, *Babesia bigemina* 6064. disease transmission, cattle, *Babesia bigemina* 8420. infection, pathogens, bacteria 5030. occurrence, man, case reports, South Africa 1367. vectors, mortality, reproduction, parasites, *Babesia bigemina* 6025.
- Boophilus microplus**, *Boophilus annulatus*, hybridization, sterility, offspring 3112. cell cycle, meiosis [51]. chemical control, pesticides, developmental stages effects on susceptibility 293. embryo cells, cell culture, chromosomes, ultrastructure 875. endocrine glands, ultrastructure, role, vitellogenesis 989. host-parasite interactions, effects on, metabolism, body weight, Bos 647. hosts, parasites, *Babesia bovis*, effects on, fecundity, oviposition 2038. infestation, disease transmission, pest control, livestock, Australia 2934. livestock pests, infestation, Barbados 1328. parasites, chemical control, acaricides, cattle 5278. parasites, infection, *Babesia bigemina* 8983. parasites, oviposition, timing, seasonal variations, cattle 1916. parasites, vectors, disease transmission, India 2183. parasitism, inflammation, Bos taurus 2912. pest control, acaricides, coumaphos, Bay Vb 9328 Flowable, cattle 4509. pest control, chemical control 6071. pesticide resistance, surveys, Australia 3448.
- Boophilus decoloratus**, infection, cattle redwater fever vectors, effects on survival, sexual reproduction, *Babesia bigemina* 4205.
- Boreochlorax maculipennis**, flight, range extension, geographical distribution, new records, USA, Mississippi 2366.
- Boers**, biology, behavior, control, *Coleoptera*, *Lepidoptera* 3628. *Crossidius pulchellus*, feeding behavior, roots, *Gutierrezia sarothrae*, *Gutierrezia macrocephala*, USA, New Mexico 488. pests, life history, *Agrius bilineatus*, USA, Wisconsin 4333. wood, digestion, nutrition, feeding behavior, *Crioceraphus syriacus*, *Rhagium inquisitor*, *Ergates faber* 4344.

- Boreus brumalis**, geographical distribution, Canada, Ontario 7114.
Boreus nivorundus, geographical distribution, Canada, Ontario 7114.
Boric acid, nuclear polyhedrosis virus, pathogenicity, pest control, *Lymantria dispar* 8145.
 toxicity, bait, *Blattella germanica* 5776.
Boroeo, new species, taxonomy, morphology, *Denisimeria martyni* 23.
 new species, taxonomy, morphology, *Heterocleptes spinosus* 4013.
 new species, taxonomy, morphology, *Parabupares robustus*, *Sotekia minima* 7155.
 new species, taxonomy, morphology, *Thagna fossata* 8808.
 new species, taxonomy, morphology, *Timissa classieyi* 4053.
Borneo, Sarawak, new species, *Pachypeltus gigas* 4851.
Borrelia anserina, pathogens, disease transmission, *Argas persicus*, *Argas africanus* 4501.
Bos indicus, mortality, infestation, blood meals, *Aedes sollicitans*, USA, Texas 3660.
Bos taurus, inflammation, parasitism, *Boophilus microplus* 2912.
Boemina longistria, ecological distribution, predation effects on, *Chaoborus americanus*, USA, Michigan 583.
Bethyridae, occurrence, biogeography, Africa, South 9486.
Botocudo fraternus, geographical distribution, new records, India 7911.
Botocudo signanda, geographical distribution, new records, India 7911.
Botocodomyia clypeatus, morphology, head, pronotum 4849.
Botswana, surveys, abundance, species composition, *Isodoridae* 3672.
 toxicity, insecticides, aerosols, drift, pesticide resistance, *Glossina morsitans* 1469.
Boutetella gibbosa, taxonomy, new species, morphology, color, USA, South Carolina 1620.
Bouteloua gracilis, growth regulators, saliva, *Brachystola magna*, effects on 2058.
Bovicola, morphology, parasites, *Capra hircus* 8335.
 parasites, rearing, media (culture) 8337.
Bovine demodicosis, case reports, domestic animals, *Demodex bovis*, *Nigena* 6075.
Bovine leukemia virus, disease transmission, vectors, *Anopheles* 8432.
Boydella nigra, geographical distribution, Passer domesticus, USA, Hawaii 795.
Brachiaris, pest attack, occurrence, *Deois flavipicta*, *Zulia enteriana*, Brazil 6158.
Brachlaris ranosa, feeding behavior, *Ostrinia nubilalis*, new records 484.
Brachiopoda, taxonomy, homonymy, *Lepidoptera* 7991.
Brachyanae, new genera, 7 new species, taxonomy, morphology 7189.
Brachycaudus helichrysis, plum pox virus vectors, flight activity, orchards 3835.
Brachyconites spiniae, life history, production, feeding, larvae, USA, North Carolina 1484.
Brachycera, surveys, geographical distribution, new species, Czechoslovakia 2356.
Brachycones spinicollis, population dynamics, feeding behavior, habitat, dunes, Egypt 7591.
Brachychochthonius, new species, Greece 7142.
Brachydesmus ferrugineus, new records, Iran 851.
Brachygeophilus, morphology, taxonomy, synonymy, *Dysmesus* 3236.
Brachylobopyga, new genera, taxonomy 8811.
Brachylobopyga decorata, new species, taxonomy, morphology, Sulawesi 8811.
Brachymeria faee, parasites, *Sylepta derogata*, Nigeria, Ibadan 5938.
Brachymeria intermedia, mating behavior, courtship 2741.
 parasitoids, nutrition, nitrogen uptake, *Lymantria dispar* 8326.
 sex pheromone, biosynthesis, pheromone emission, males response 2754.
Brachymeria lassus, mating behavior, courtship 2741.
 parasitoids, pest control, biological control, *Lymantria dispar*, USA, Connecticut 8466.
 rearing methodology, parasites 1701.
 sex pheromone, biosynthesis, pheromone emission, males response 2754.
Brachymeria nephantidis, parasitoids, pests, *Nephantis serinopa*, India, Kerala 6761.
Brachymeria nesoai, parasitoids, pests, *Nephantis serinopa*, India, Kerala 6761.
Brachynotocoris heidemanni, parasites, synonymy, morphology, *Brachynotocoris puncticornis* 32.
Brachynotocoris puncticornis, parasites, synonymy, morphology, *Brachynotocoris heidemanni* 32.
Brachypelma, new species, taxonomy, morphology, Costa Rica 6352.
Brachypogon kraussi, new species, taxonomy, morphology, Solomon Is 7176.
Brachypogon tokunagai, new species, taxonomy, morphology, Solomon Is 7176.
Brachypteris, genetic analysis, *Oncochelus fasciatus* 6291.
 morphology, *Alathetus* 8799.
 temperature effects on, *Pyrrhocoris apterus* 7465.
Brachypterus subclidius, synonymy, taxonomic revision, *Cybocephalus subclidius* 8759.
Brachys tessellatus, bionomics, life history, host plants, *Quercus laevis*, USA, Southeast 1988.
Brachystola magna, new records, geographical distribution, Canada, Newfoundland 3160.
 saliva, growth regulators, effects on, *Bouteloua gracilis* 2058.
 thermoregulation, role, thermoregulatory behavior, coloration 4171.
Brachytarsina, morphology, keys, geographical distribution, Philippines 871.
Brachythemis contaminata, life history, morphology, eggs, development, larvae 8280.
Brachytripes megacephalus, seasonal variations, sexual reproduction, physical activity, mating behavior, feeding behavior, Sicily 4324.
Brachytripes portentosus, population density, burrowing behavior, seasonal variations, India, Nagaland, Medziphema 4447.
Brackish water, coastal environment, environmental effects, survival, *Myrmica rubra*, *Myrmica scabrinodis*, *Lasius flavus*, *Lasius niger* 4455.
Brackishwater environment, larvae, Simuliidae 5431.
 ponds, population dynamics, *Chironomus decorus*, USA, New Jersey 7014.
 toxicity, growth regulators, MV678, *Aedes sollicitans*, *Culex salinarius* 6618.
Bracon, life history, *Symmetrischema capsica* parasites 6720.
 natural enemies, *Proceudocheilus utilis*, India 3615.
Bracon brevicornis, parasites, host preferences, larvae effects on development 509.
Bracon hebetor, methotrexate, toxicity, disposition, gut, ovary 8198.
 methotrexate toxicity, effects on protein biosynthesis, egg production 8203.
 parasites, suitability tests, *Chilo arcticus* 1217.
 pest control parasites, longevity, fecundity, oviposition 2025.
 pollution effects, sulfur dioxide, sexual reproduction 7441.
 population growth, host-parasite interactions, *Ephestia cautella*, *Achroia grisea*, *Galleria mellonella* 1227.
Bracon mellitor, parasites, infestation, *Rhincyllus conicus*, USA, Virginia 5937.
Braconidae, parasitoids, incidence, *Ceratitis capitata*, *Anastrepha*, Costa Rica 2818.
 parasitoids, species composition, larvae, *Plutella maculipennis* 9139.
 surveys, new species, Tunisia 2449.
 systematics, morphology, antennal sensilla 2509.
 taxonomy, morphology 7215.
 venom gland anatomy 8113.
Braconinae, wings, morphology, hamuli, taxonomy 7277.
Bradypus infuscatus, dung, utilization, *Urocyon gorgon*, *Notiobia parilis*, Panama 8370.
Bradysia impatiens, mating behavior, flight activity, sex pheromone effects on 416.
Bradysia spatitergum, DNA biosynthesis, salivary gland 1540.
 salivary gland DNA, characterization 3883.
Brahmaea christophi, conspecifics, morphology, *Brahmaea ledereri*, Turkey 5513.
Brahmaea ledereri, new records, geographical distribution, conspecifics, *Brahmaea christophi*, Turkey 5513.
Brain, ablation, medial neurosecretory cells, effects on corpora allata, vitellogenesis, *Eurygaster egnipicus* 6590.
 adenylate cyclase, enzymatic activity, diapause, *Hyalophora cecropia*, *Antheraea pernyi* 124.
 adenylate cyclase regulation, plasma membranes, *Ceratitis capitata* 8091.
 amines, effects on conditioned response, unconditioned response, olfactory stimuli 6687.
 auditory perception neurons, morphology, neurophysiology, *Gryllus bimaculatus* 4960.
 biochemistry, cyclic AMP, metamorphosis effects on, *Mamestra configurata* 960.
 cells, heterochromatin, replication, larvae, *Drosophila nasuta* 4678.
 cells, ultrastructure, neurosecretion, pupae, *Bombyx mori* 991.
 centers, food consumption inhibition, *Labidura riparia* 479.
 distribution, neurosecretion, *Kaloterpes flavicollis*, *Anacanthotermes ahngerianus*, *Reticulitermes lucifugus* 123.
 hormones, bioassays, indicator species, *Philosamia ricini*, *Bombyx mori* 7330.
 hormones, ovary development, juvenile hormones, *Aedes aegypti* 3488.
 immunochemistry, peptides, characterization, *Calliphora vomitoria* 2531.
 monoamine neurons, distribution, neurosecretion 3279.
 morphology, *Ceratitis delorata* 7289.
 morphology, phylogeny, *Symphyla* 7066.
 neurons, morphology, *Gryllus bimaculatus* 129.
 neurosecretion, cells, cytology, *Amsacta collaris* 249.
 neurosecretion cells, spatial distribution, size, histology, *Poecilotheres pictus* 5666.
 neurosecretion, diapause, activation, *Calliphora vicina* 6639.
 neurosecretion, ovary development effects on, *Acheta domestica* 984.
 pancreas proteins, immunochemistry localization, *Ernstalis aeneus* 2523.
 peptides, amino acid composition, *Calliphora vomitoria* 7290.
 proteins isolation, pancreas, *Calliphora vomitoria* 963.
 rats, synaptosomes, sodium channels, *Centruroides suffusus* neurotoxins effects on 8175.
 steroids, biochemical analysis, identification, *Atta cephalotes isthmica* 5690.
 titus toxin effects on biosynthesis, release, acetylcholine, rats, *Titus serrulatus* 8180.
Brachyera, species composition, population dynamics, seasonal variations, forests, Czechoslovakia 7101.
Brasilianus fraterculus, new species, taxonomy, morphology, Paraguay 8752.
Brasilianus glaberrimus, new species, taxonomy, morphology, Brazil 8752.
Brasilianus intermedius, new species, taxonomy, morphology, Brazil 8752.

- Brasiliellus luridipennis**, taxonomy, synonymy, *Brasiliellus plicatus* 8752.
- Brasiliellus plicatus**, taxonomy, synonymy, *Brasiliellus luridipennis* 8752.
- Brassicula buckii**, new records, geographical distribution, Brazil 8739.
- Brassica**, crops, pests infestation, vertical distribution, Insecta, India, Meghalaya 7687 host plants, pests population dynamics, *Liparis erysimi*, India 7776
- Brassica campestris**, crop fields, pest control, economics, *Phyllotreta*, Canada 8534 cultivars, diets, larvae, *Entomosciella americana* 2076 infestation, pests, Delia, Canada, April 8479 nectar secretion, effects on feeding behavior, Apis 544 oviposition, host preferences, host plants, Sweden 4401
- Brassica juncea**, oviposition, host preferences, host plants, Sweden 4401.
- Brassica napus**, crop yield, pest control effects on, Delia brassicae, Myzus persicae 3039 cultivars, diets, larvae, *Entomosciella americana* 2076 cultivars, susceptibility, pest infestation, *Dasineura brassicae* 9308 oviposition, host preferences, host plants, Sweden 4401
- Brassica napus oleifera**, pollination, flowering phenology, yield, Apis mellifera 4582.
- Brassica nigra**, host plants, nutrient availability, effects on development, *Pieris rapae*, *Spodoptera eridania* 5960 oviposition, host preferences, host plants, Sweden 4401.
- Brassicella oleracea**, agricultural ecosystems, abundance, activity patterns, *Labiada riparia* 2163 crops, damage, pests, feeding, *Trichoplusia ni*, *Pieris rapae*, *Plutella xylostella* 8502 cultivars, pest control, insecticides, *Bacillus thuringiensis*, *Trichoplusia ni*, *Pieris rapae*, *Plutella xylostella* 1834 pests, contamination, damage, sauerkraut, *Thrips tabaci* 8508 pests, *Myzus persicae*, *Brevicoryne brassicae*, *Hyadaphis erysimi*, *Macrosiphum euphorbiae*, USA, California 4608
- Brassicella oleracea capitata**, crop fields, pest control, *Spodoptera litura* 8439 crop fields, pollinators, foraging behavior, Insecta 5297.
- Brassica rapa**, host plants, leaves, feeding, *Pieris brassicae* 6746 turnip mosaic virus infection, pest resistance, *Myzus persicae*, *Brevicoryne brassicae* 3830.
- Brassicaceae**, host plants, susceptibility, pests, *Brevicoryne brassicae* 9301 host plants susceptibility, pests, *Brevicoryne brassicae* 6085
- Brazil**, activity patterns, periodicity, *Culicidae* 4498 apiculture, economics 4540 autogeny, first record, *Tabanidae* 1132 biometrics, sexual reproduction, cycles, *Anopheles darlingi* 7527 blood meals, biting, man, *Anopheles triannulatus* bachmanni 4354 colonies, infestation, parasites, *Varroa jacobsoni*, *Apis mellifera* 4456 disease reservoirs, Mayaro virus, yellow fever virus, *Haemagogus janthinomys* 625 dispersal, flight activity, marking, *Triatoma infestans* 1263 dispersal, nymphs, legumes, *Nezara viridula*, *Piezodorus guildini* 559 ecological distribution, habitat, feeding, *Tityus trivittatus* fasciolatus 6838 flowering phenology, pollination, *Poumoura cecropifolia*, *Apidae* 4412 geographical distribution, habitat, feeding behavior, *Opisthacanthus cayaporum* 8220 geographical distribution, nests structure, nesting behavior, *Polybia junnei* 6222 introduced species, dispersal, geographical distribution, reviews, *Chrysomya chloropyga*, *Chrysomya megacephala*, *Chrysomya albiceps* 9172 life cycle, morphology, immature stages, *Dysidea borealis* 6484 life history, food plants, sympatric populations, *Papilionidae* 5233 morphology, biometry, castes, immatures, *Nasutitermes aequilinus* 8869 morphology, geographical distribution, *Trichilium hirsutum* 4109 morphology, taxonomy, *Taeniatarsus* 3992 new genera, new species, taxonomy, morphology, *Annamphorus thimoteocostae* 8741 new genera, new species, taxonomy, morphology, *Misotrochus mendocinus* 6354 new records, geographical distribution, *Neoblatella puerilis* 9499 new records, geographical distribution, parasites, *Spelocognathus galli* 6334 new records, occurrence, morphology, males, *Rhinoseius brasiliensis* 6502 new species, morphology, taxonomy, *Alcistes* 3214 new species, new genera, identification keys, aquatic animals, *Dytiscidae* 809 new species, new genera, morphology, *Tonnionella mirabilis*, *Caenobrunetta chiniolagellata* 1630 new species, new genera, taxonomy, morphology, *Atlantemys gunnisoni*, *Atlantemys ibitinguensis* 8336 new species, new genera, taxonomy, morphology, *Ceraeolestes proboscis* 8739 new species, taxonomy, morphology, *Achryson peracchi*, *Achryson meridionale* 6362 11 new species, taxonomy, morphology, *Anastrepha* 8788 new species, taxonomy, morphology, *Anthrax* 7942 new species, taxonomy, morphology, *Bactroia minuscula*, *Hebestola brasiliensis*, *Pseudognostola reichardi* 6363 new species, taxonomy, morphology, *Belotus acutipennis*, *Belotus maculatus* platonensis 6370 new species, taxonomy, morphology, *Brasiliellus glaberrimus*, *Brasiliellus intermedius* 8752 new species, taxonomy, morphology, *Ceraleurodes duckeri* 4015 new species, taxonomy, morphology, *Comptosius deceptor*, *Paromocerus stictionotus* 6364 new species, taxonomy, morphology, *Corotoca severis* 6377 new species, taxonomy, morphology, *Diebelacera adusta* 3202 new species, taxonomy, morphology, *Euthima araujo*, *Cylloceria chionea* 8758 new species, taxonomy, morphology, *Falsamblesthis ibyara* 6357 new species, taxonomy, morphology, *Galedonta comuta*, *Galedonta rotundicornis* 5582 new species, taxonomy, morphology, *Gongronemus veta* 6454 new species, taxonomy, morphology, *Hylobothynus pontis* 8401 new species, taxonomy, morphology, *Hyperphassa proserpi* 7157 new species, taxonomy, morphology, *Iguassuoides lucidus*, *Paraludewaldia caramaschi* 8738 new species, taxonomy, morphology, *Lissonoschema macrocolum* 6367
- Brazil, (continued)** new species, taxonomy, morphology, *Macronathus belemensis* 7941 new species, taxonomy, morphology, *Monrosia unipi* 6369 new species, taxonomy, morphology, *Monrosia calva* 6358 new species, taxonomy, morphology, *Nasutitermes acangussu* 8834 new species, taxonomy, morphology, *Oedignathus capensis* 8735 new species, taxonomy, morphology, *Orthognathomermis insignis* 6443 new species, taxonomy, morphology, *Parabellia areolata*, *Parabellia callosa*, *Parabellia dubitata*, *Parabellia sylflera*, *Parabellia tapraes* 8840 new species, taxonomy, morphology, *Phthoracada* 3971 new species, taxonomy, morphology, *Picicola striata* 4899 new species, taxonomy, morphology, *Sassacus phycobolus* 8736 new species, taxonomy, morphology, *Taeniatarsus teresacristinae* 7186 new species, taxonomy, morphology, *Taurimermis vialis* 8835 new species, taxonomy, morphology, *Trichonyssodry cinctus*, *Trichonyssodry melasmus* 4778 new species, taxonomy, morphology, *Trypanosoma eliasi*, *Trypanosoma curisioi* 8838 new species, 5 species, *Neothrips* 1616 oviposition, host plants, *Apogonalia grossa* 6668 parasitism, infestation, *Eutrichopodopsis nitens*, *Nezara viridula* 6758 pathogens, infection, population regulation, *Triplisporium*, *Tetranychus evansi* 4197 pests, population dynamics, orchards, *Prunus persica*, *Grapholita molesta* 6034 pests, weather, effects on population dynamics, *Lepidoptera* 6834 pollination, flowering phenology, *Rolonia muscosa*, *Chrysomelidae* 4410 population dynamics, crop fields, *Vigan unguiculata*, *Phaseolus vulgaris*, *Empoasca kraeneni* 6044 surveys, *Pseudochorutaria* 4745 taxonomic revision, morphology, *Paraxilla* 6373 taxonomic revision, synonymy, *Sphagomea bicolor*, *Sphagomea sahbergi*, new species, *Sphagomea parensis*, *Sphagomea sumalis* 6381 taxonomy, morphology, medical importance, *Simulium amazonicum* 3196 taxonomy, morphology, *Pachymetria* 6374 vectors, disease transmission, *Trypanosoma cruzi* 5286
- Brazil, Amazon Basin**, repellents, comparative studies, vectors, disease transmission, *simulid* 1364 taxonomy, morphology, *Dilariidae* 4055 taxonomy, morphology, keys, *Ascalaphidae* 4056 taxonomy, morphology, *Sisyridae* 4054
- Brazil, Amazonas**, epidemiology, malaria, vectors, *Anopheles darlingi* 5271 epizootics, infestation, *Cordyceps unilateralis*, *Campoplex* 5023 malaria, disease control, human impact, roads 8421
- Brazil, Amazonia**, pasture, aggregation, environmental factors, *Collemboles* 4425 taxonomy, morphology, *Psychodopygus squamiventris squamiventris*, *Psychodopygus squamiventris maripensis* 5573
- Brazil, Bahia**, new species, taxonomy, morphology, *Tityus lamottei* 4769
- Brazil, Central Amazon Region**, new species, taxonomy, morphology, *Lutzomyia pennyi* 7188
- Brazil, Manaus**, life history, population dynamics, *Tabanidae* 4426 new subspecies, taxonomy, morphology, *Lutzomyia olmeca novicia* 4839
- Brazil, Minas Gerais**, new species, taxonomy, morphology, *Hypoprosopis serrata*, *Hypoprosopis capitata* 6420
- Brazil, Minas Gerais State**, *Trypanosoma cruzi* vectors, disease reservoirs, habitat, *Triatoma arthurneiva* 5283
- Brazil, Para State**, pests, infestation, *Manihot esculenta* crop fields, *Isopora* 4597
- Brazil, Roraima de Marica**, leaf litter community composition, seasonal variations, environmental factors, *Acana* 5219
- Brazil, Rio de Janeiro**, new species, taxonomy, morphology, *Paronella itjueana* 8779
- Brazil, São Paulo**, life cycle, morphology, immature stages, *Citheronia laocoon* 6492 new species, new genera, taxonomy, morphology, *Guatubia clare* 6353 pests, species composition, population levels, *Saccharum officinale* crop fields, *Elaterea* 6098 sexual behavior, oviposition, *Phthia picta* 5105
- Brazil, Vicosa**, new species, taxonomy, morphology, *Zelotocoris vicosensis* 4850
- Breakage**, sex chromosomes, spermatozoan females, *methylenemelanine*, *ethylmethanesulfonate* effects on, *Drosophila melanogaster* 1515
- Breeding**, abundance, *Hebortus peltiger*, *British Isles*, *England*, *Sussex* 5992 age, population structure, *Tabanidae*, *Switzerland* 4449 annual cycles, population dynamics, environmental factors, *Anopheles messeae*, *messeae*, *Germany*, *Fed Rep* 3624 apiculture, American foulbrood disease resistance, *Apis mellifera* 3823 apiculture management, *Apis mellifera* 5410 apiculture, population genetics, sex determination, *Apis mellifera* 8659 apiculture, selection, stock maintenance, methodology, *Apis mellifera* 8461 cages, materials, *Lepidoptera* 5630 feeding behavior, host preferences, *Phlebotomus martini* 3567 geographical distribution, morphology, *Andricus quercuscalicis*, *British Isles* 7616 habitat, population density, *Culicidae*, *USSR*, *Baikal* 9220 habitat, vectors, disease transmission, *Rhipicephalus appendiculatus*, *Africa* 4683 insemination, spermatozoan, *Apis mellifera* 8553 life cycle, photoperiod effects on, *Amradillidum vulgare* 6643 life cycle, visceral leishmaniasis vectors, *Phlebotomus martini*, *Kenya* 8286 lines, diapause eggs, protein composition, *Bombus mori* 9420 mutants, characterization, *Bombus mori* 9417 paddy fields, agricultural practices effects on, *Culicidae*, *USA*, *Louisiana* 2920 pest resistance, crops, *Insecta* 4531 pest resistance, galls, *Oryza sativa*, *Oryza sativa* 5407 pest resistance, genetic factors, *Fraxina ananassa*, *Tetranychus urticae* 554 pest resistance, host plants, *Triticum*, *Schizaphis graminum* 3717 selection, cocoons, physical properties, *Bombus mori* 9427 selection, cocoons, physical properties, *Bombus mori* 9432

Breeding, (continued)

selection methodology, mathematical models, statistical genetics, *Apis mellifera* 8620.
 site location, substrate preferences, *Chrysopilus*, *Puolina*, *Rhagio*, *Symphoromyia* 3534.
 survival eggs, manure, *Cochliomyia hominivorax* 6037.
 synonymy, *Dendrocerus aphidum*, *Dendrocerus breadalbensis* 4019.

Breeding sites,

Ceratopogonidae, China, People's Rep. 1575.
 effects on larvae survival, *Culex pipiens* 618.
 environmental effects, shade, effects on pollination, *Theobroma cacao*, *Forcipomyia* 4267.
 fruits, interspecific relationships, *Penicillium*, *Drosophila immigrans* 6051.
 habitat selection, *Culiceta melanura*, *Culiceta moritans*, USA, New York, Toad Harbor Swamp 6875.
 host plants, development, pests, *Scolytus multistriatus*, *Ulmus procera* 6195.
 recolonization, pest control, onchocerciasis vectors, *Simulium damnosum*, Ivory Coast 5269.
 species richness, females, *Culex theileri*, *Aedes juppi*, *Aedes durbanensis*, South Africa, Orange Free State 5282.
 storm water drainage systems, *Culicidae*, USA, New Jersey 2918.
 substrate specificity, hay, larvae, pupae, *Stomoxys calcitrans* 9071.
 surveys, vector tanks, *Aedes*, *Culex*, *Armigeres*, *Uranotaenia*, Malaysia 9261.

Breeding status,

age composition, seasonal variations, *Cnaphalocrocis medinalis*, Japan 7797.
 gravid, virgin, activity patterns, resting behavior, females, *Glossina moritans* 4690.
 males, genetic variance, *Drosophila melanogaster*, *Drosophila pseudoobscura* 3125.
 male selection, body size, *Tetraneura tetraephalum* 4298.
 mating behavior, fitness, *Drosophila* 5059.
 pesticide resistance, malathion, *Sitophilus oryzae* 5043.
 phonotaxis, auditory communication, social environment effects on, *Palmaricoria nana* 9077.
 phylogeny, population genetics, *Drosophila* 6296.
 population density, predation, *Megacnada septendecim* 5983.
 population dynamics, diapause effects on sex ratio, *Sarcophaga* 3605.
 population establishment, pollinators, *Osmia lignaria propinqua*, USA, California 9286.
 reproduction, diets effects on, *Isoetema viridis* 4268.
 resource availability, oviposition, population density, males, *Scatophaga stercoraria* 6857.
 social hierarchy, pleometrotic foundations, haplometrotic foundations, *Polistes gallicus* 5423.

Breitia sergenti,

hosts, *Culex pipiens pallens*, *Aedes albopictus*, China, People's Rep., Yunnan Province 5288.

Brentia,

taxonomic revision, synonymy, *Nemoecephaline*, Brazil 7157.

Brentus anchorage,

mate selection, aggressive behavior, body size, sexual selection 6658.

Brevicoryne brassicae,

host plants, pests, spatial distribution, *Myzus persicae*, USA, California, Orange Co. 8358.

Brevicoryne brassicae,

susceptibility, insecticides, ^{14}C -phorate, diets 2658.

Brevicoryne brassicae,

pests, abundance, predators effects on 6908.

Brevicoryne brassicae,

host plants infection effects on pest resistance, turnip mosaic virus, *Brassica rapa* 3830.

insecticides, toxicity, pest control 7401.

occurrence, population dynamics, sampling methods, crop fields, USA, California 9349.

pest control, chemical control, insecticides 7780.

pests, host plants susceptibility, *Brassicaceae* 6085.

pests, host plants susceptibility, *Brassicaceae* 9301.

population dynamics, seasonal variations, spatial distribution, crop fields.

Brassica oleracea, USA, California 4608.

survival, fecundity, host plants chemical composition effects on 7559.

Brevipalpus phoeniceus,

pest control, chemical control, population dynamics, Indonesia 5388.

Brightness,

visual discrimination, color, light intensity, achromatic vision, *Apis mellifera carnica* 4973.

Brightness discrimination learning,

color, light intensity, achromatic vision, *Apis mellifera carnica* 4974.

Brillia par,

taxonomic revision, new genera, *Xylotopus*, Nearctic Region 3994.

Brinckochrysa naumanni,

new species, taxonomy, morphology, Afghanistan 4060.

Bristles,

fenulum, morphology, females, *Lepidoptera* 1720.

leg, morphometry, speciation, *Drosophila silvestris*, Hawaii 6294.

morphology, selection, strains, *Drosophila melanogaster* 1553.

selection, chromosomes, *Drosophila melanogaster* 1513.

British Isles,

chemical control, pest control, pesticide resistance, *Tetranychus urticae* 2980.

coevolution, host plants trees, herbivory, *Insecta* 2846.

community composition, trophic status, food preferences, seasonal variations,

annual variations, *Syrphidae* 3617.

development, species composition, fungi association, *Phoridae* 9107.

diapause, overwintering, *Psila rosae* 2674.

distribution, abundance, habitat, *Mompha nidoicola* 5882.

distribution, species composition, habitat, *Salticidae* 6305.

endangered species, rare species, *Insecta* 2118.

entomofauna, check lists, ecology, geographical distribution 3137.

feeding behavior, predation, resource partitioning, habitat selection, *Notonecta*

2904.

genetic variance, allozymes, *Xestia c-nigrum* 8660.

geographical distribution, breeding, morphology, *Andricus quercuscalcis* 7616.

British Isles, (continued)

geographical distribution, food plants, *Melanargia galathea* 9091.
 geographical distribution, morphology, *Arhopalus rusticus* 6304.
 geographical distribution, new records, *Ochrolepura fennica* 6302.
 geographical distribution, new records, *Saturnia pavonia* 6300.
 geographical distribution, occurrence, *Orellia falcata*, *Dithyrus gutulians* 6310.
 geographical distribution, *Psephenus* 6312.
 geographical distribution, range, *Caloptilia rufipennella* 6314.
 habitat, occurrence, *Vanessa cardui* 5910.
 heavy metals, bioaccumulation, pollution levels, *Onciscus asellus* 8186.
 hedgerows, species diversity, management effects on, *Arthropoda* 7618.
 herbivores, host plants records, species-area relation, species composition,

Typhlocybinae 5965.

host-parasite interactions, *Metopolophium dirhodum*, *Sitobion avenae*, *Hymenoptera*

1288.

information centers, terrestrial ecosystems, surveys, *Insecta* 2120.

institutions, wildlife conservation, *Lepidoptera* 2124.

introduced species, pest control, *Limnomyza trifolii* 6896.

keys, morphology, *Acantinae* 4946.

larvae, morphology, keys, *Chrysomelinae* 5636.

life cycle, crop fields damage, pest control, *Aphis fabae* 3800.

life cycle, feeding, habitat, *Necrodes*, *Necrophorus* 5909.

life history, bionomics, population ecology, *Parthenolecanium corni*,

Parthenolecanium wislizeni 5908.

morphology, identification keys, *Diptera* 3258.

morphology, inheritance, population genetics, *Cyclophora albipunctata subroseata*

4690.

morphology, keys, *Pristiphora compressa*, *Pristiphora pallida*, *Pristiphora*

wesmali 5646.

natural enemies, effects on population dynamics, *Sitobion avenae*, *Metopolophium*

dirhodum 8394.

natural enemies, effects on population levels, *Cydia pomonella* 8397.

new records, disease transmission, parasites, sheep, *Babesia motasi*,

Haemaphysalis punctata 4538.

new records, geographical distribution, *Dioryctria schuetzeella* 6306.

new records, geographical distribution, *Laricobius erichsoni*, *Dorodontidae* 5509.

new records, geographical distribution, *Leucopis* 9442.

new records, geographical distribution, *Microsania straeleni* 5510.

new records, geographical distribution, *Pachynematus smithi* 4034.

new records, geographical distribution, *Pristiphora lanifica* 5512.

new records, geographical distribution, *Tenthredinidae* 7886.

new records, geographical distribution, *Tinea columbaria* 5511.

new records, geographical distribution, *Tychius crassirostris* 6303.

new records, pests, host plants, *Bemisia hawaiiensis*, *Laurus nobilis* 2977.

new species, taxonomy, morphology, *Crossocerus distinguendus* 5593.

new species, taxonomy, morphology, *Mitopus ericaeus* 8740.

occurrence, *Conistra rubripes* 9445.

occurrence, migrations, *Lepidoptera* 9449.

occurrence, new records, *Microlepidoptera* 9448.

parasitoids, ecological distribution, abundance, grasslands, *Aphidius* 8393.

pathogens, infection, *Tetranychus urticae*, *Cecidophorus ribis* 1811.

pest control, biological control, predators, *Phytoseiulus persimilis*, *Tetranychus*

urticae 3023.

pest outbreaks, *Lepidoptera* decemlineata 6898.

pesticide resistance, strains, lindane, *Dermestes maculatus* 3115.

population decline, environmental conditions, *Carterocephalus palaemon* 4470.

population decline, extinction, *Maculinea* 2117.

population decline, interspecific relationships, host plants, *Zygaena trifolii*

decreta, *Zygaena loniceriae* 5224.

population levels, rare species, *Strymonia w-album* 5998.

population status, crop fields, *Aphididae* 6927.

population studies, diapause, *Pennis napa* 5074.

predation, mortality, developmental stages, *Gastrophysa polygoni* 8396.

predation, natural enemies, effects on population levels, *Sitobion avenae*,

Metopolophium dirhodum, *Metopolophium festucae* 8389.

predator-prey interactions, effects on population levels, dispersal, *Carabidae*,

Myzus persicae 8391.

records, occurrence, egg production, *Lepidoptera* decemlineata 1440.

species composition, surveys, *Saltatoria* 6301.

surveys, species composition, abundance, *Diptera* 6309.

urban environment, habitat preferences, nesting, walls, *Megachilidae* 1182.

wildlife conservation, education, endangered species, *Lepidoptera* 2123.

wildlife conservation, nature reserves, institutions, *Invertebrata* 2126.

British Isles, Berkshire,

new records, geographical distribution, *Microdium halidai*, *Microscydus minimus*,

Atheta taxicoides, *Gyrophana jolyoides*, *Platycis minutus*, *Triplax aenea* 6313.

British Isles, Berwyn Forest,

surveys, abundance, *Lepidoptera* 2353.

British Isles, British Museum of Natural History,

collections, *Muridae* 4753.

British Isles Coast,

intertidal environment, ecological distribution, adaptations, *Aepus marinus*,

Aepus robbi 5230.

British Isles, England,

agricultural land, pests, abundance, surveys, *Psylliodes chrysocephala* 2260.

Aphididae predators, phenology, *Chrysopidae*, *Coccinellidae*, *Syrphidae* 8392.

colonies, nest building (non-reproductive), vegetation, *Myrmica subeti*, *Myrmica*

scabrinodis 8588.

environmental surveys, geographical distribution, occurrence, *Lonchotera lutea*,

Lonchotera furcata 3559.

host-parasite interactions, streams, *Simulium ornatum*, *Simulium equinum*, *Simulium*

angustipes, *Sperchon setiger* 8313.

institutions, wildlife conservation, *Insecta* 2125.

leaf litter, herbivores, community composition, species richness, *Insecta* 9187.

life cycle, growth, development, *Odontocentrus albicomis* 4660.

life cycle, life span, *Carabus glabratus*, *Carabus problematicus* 5894.

life history, population dynamics, seasonal variations, *Chironomidae* 4659.

life history, sexual reproduction, fecundity, *Gastrophysa polygoni* 4334.

occurrence, *Coleophora machinella* 9446.

overwintering, parasites, *Anthophila fabriciana* 5153.

pests, infestation, *Limus ustulissimus*, *Trioxymus dimittimus* 2096.

population dynamics, colonies, *Myrmica subeti*, *Myrmica scabrinodis* 6218.

population ecology, mortality, parasitism, *Hymenoptera*, *Ladoga camilla* 6009.

population studies, colonies, grasslands, *Myrmica subeti*, *Myrmica scabrinodis*

8587.

predators, population dynamics, *Carabidae* 8387.

- British Isles, England, (continued)**
 sampling, rearing, methodology, larvae, *Micropteryx* 4919.
 soil fauna, autecology mining and reclamation, *Oppiella nova*, *Mixochthonius* laticeps 8597.
 wildlife conservation, rare species, *Lepidoptera* 2119.
- British Isles, England, Cornwall Co.,**
 new records, geographical distribution, *Impimora retusa* 9443.
- British Isles, England, Cumbria,**
 rare species, new records, *Dorytomus salicinus* 6298
- British Isles, England, Kew Gardens,**
 pest outbreaks, host plants, *Lupinus*, *Macroshum albifrons* 7744
- British Isles, England, Lune R.,**
 life history, sexual reproduction, *Ecdyonurus* 3851.
- British Isles, England, Staffordshire,**
 species composition, habitat, abundance, *Lepidoptera* 7887
- British Isles, England, Sussex,**
 occurrence, abundance, breeding, *Heliothis peltigera* 5992.
- British Isles, England, Sussex, Abbot's Wood,**
 population decline, species composition, *Microlepidoptera* 9219
- British Isles, England, West Bromwich, Sandwell Valley,**
 occurrence, species composition, *Calyptraea* 9444
- British Isles, England, Yorkshire,**
 new records, species composition, *Lepidoptera* 9450.
- British Isles, Huntingdon,**
 surveys, abundance, *Lepidoptera* 2354
- British Isles, Isle of Man,**
 check lists, species composition, *Hymenoptera* 6308.
- British Isles, Lake District,**
 streams, life cycle, oviposition, *Phylonomus montanus* 2794.
- British Isles, Lambourn R.,**
 life cycle, population studies, habitat, flight activity, *Ephemera danica* 7013.
- British Isles, Norfolk Breckland,**
 freshwater environments, environmental surveys, species richness, macrophytes, species composition, *Coleoptera*, *Hemiptera* 6234.
- British Isles, Scilly Is.,**
 new species, taxonomy, morphology, *Thyreophagus vermicularis* 8729.
- British Isles, Scotland,**
 cattle pests surveys, *Diptera* 736
 occurrence, abundance, development, *Lepidoptera* 6705
 occurrence, *Pachynematus arcticus* 9452.
 occurrence, species composition, *Orthoptera* 6307.
 pollution effects, acid rain, occurrence, streams, *Siphonurus lacustri*.
Heptagenia lateral 8607.
 stored products pests, abundance, distribution, seasonal variations, *Ephestia kuehniella* 2264.
- British Isles, Scotland, Kirkcudbrightshire,**
 species composition, occurrence, *Lepidoptera* 9447.
- British Isles, Scotland, Lurgie L.,**
 species composition, *Bryopsida* association, *Coleoptera* 5508
- British Isles, Scotland, Ythan Estuary,**
 new records, predation, intertidal environment, *Nematoda*, *Staphylinus ater* 8362.
- British Isles, Wales,**
 abundance, seasonal variations, *Haemaphysalis punctata*, *Ixodes ricinus* 5263
 geographical distribution, occurrence, *Agonopterix astrantiae* 6299
- Broadbentella,**
 synonymy, *Aaroniella* 4909.
- Brochymena,**
 parasites oviposition, host specificity, *Trichopoda plumipes*, USA, Texas 2024
- Brochymena arborea,**
 parasites oviposition, host specificity, *Trichopoda plumipes*, USA, Texas 2024
- Brochymena carlosa,**
 parasites oviposition, host specificity, *Trichopoda plumipes*, USA, Texas 2024
- Brochymena quadrupunctata,**
 light activity, seasonal variations 474
- Brochymena sulcata,**
 parasites oviposition, host specificity, *Trichopoda plumipes*, USA, Texas 2024
- 5-Bromodeoxyuridine,**
 inhibition, mutants, gene expression, *Drosophila* 1528
- Bromophos,**
 insecticides, field trials, chemical control, *Calocoris norvegicus*, *Sidna kinbergi* 8476.
- Bromus inermis,**
 damage, larvae feeding behavior effects on, *Hyles lineata* 543
- Brood care,**
 eggs, maternal behavior, females, *Labrida riparia* 7489.
 Isopora colonies, population density, seasonal variations, India 5418
 nest provisioning, social organization, trophallaxis, environmental effects, *Tapinoma erraticum* 4653.
 parental behavior, adaptations, protection, environmental conditions 5108
 parental behavior, *Ancistrocerus adiabatus*, *Eudomyrca foramanus* 1913
 parental behavior, nesting, *Copris lunaris* 4292
 parental behavior, eggs, males, *Belostomatia micanulum*, Paraguay 1147
- Brood disease,**
 disease resistance, larvae removal, workers, *Apis mellifera* 8589
- Brood rearing,**
 apiculture, artificial diets, pollen, honey production, *Apis mellifera* 5306
 apiculture, diets, pollen, *Apis mellifera* 5310
 population density, food availability, colonies, *Apis mellifera* 8233
- Broods,**
 sex ratio, colonies, *Evyclus calcatus* 5422
- Brucella canis,**
 pathogens, infection, *Rhipicephalus sanguineus*, 5029
- Bruchida,**
 geographical distribution, biology, Turkey 1945
- Bruchidae,**
 autecology, pests, crops, books, *Leguminosae* 8707
 life history, feeding behavior classification, interspecific relationships, *Leguminosae* 1388
 nomenclature, check lists 7954
 stored products pests, pesticide resistance, strains, genetic factors 1068
 taxonomy, morphology, wings 7166
 taxonomy, synonymy, Nearctic Region 3162
- Bruchomorpha oculata,**
 immature stages, morphology, rearing, laboratories 1717
- Bruchus affertii,**
 infestation, pests, damage, *Trifolium alexandrinum* 6964
- Bruchus bipustulatus,**
 synonymy, *Megacerus acerbus*, Nearctic Region 3162.
- Bruchus chinensis,**
 pest control, oils, host plants, *Phascolus aureus* 6929.
- Bruchus multiguttatus,**
 synonymy, *Acanthoscelides claudens* 3186.
- Bruchus pisorum,**
 infestation, seeds, pest resistance, measuring techniques, *Pisum sativum* 8530
- Brueelia,**
 taxonomy, morphology, keys 6449.
- Brueelia superciliosa,**
 taxonomy, synonymy, nomenclature, *Alcedo fulva alcedinus* 5067.
- Brueelia,**
 parasites, morphology, keys, 10 species, Spain 8047
- Brueelia densilimba,**
 morphology, parasites, *Carduelis carduelis* 8048
- Brugia,**
 pathogens, susceptibility, genetics, *Aedes aegypti* 2623.
- Brugia malayi,**
 pathogens, susceptibility, *Aedes* 2647
 vectors, *Mansonia bonnae*, *Mansonia annulata*, *Mansonia uniformis*, *Mansonia dives*, Indonesia, Bengkulu 6062.
- Brugia pahangi,**
 host-parasite interactions, growth, diets, *Aedes aegypti* 289
 host-parasite interactions, susceptibility, diets, *Aedes aegypti* 288
 parasites, infection susceptibility, inheritance, *Aedes* 8146.
 pathogens, susceptibility, *Aedes* 2647.
- Bruchidius affertii,**
 reproduction, life cycle, environmental effects 6653.
- Bryobia rubriculatus,**
 ectoparasites, ecological distribution, *Prunus amygdalus*, USA, California 1391.
- Bryopsida,**
 association, species composition, *Coleoptera*, British Isles, Scotland, Lurgie L. 5508
- Bubalus bubalis,**
 parasites, hematophagy, effects on blood, *Haemaphysalis tubercularis*, India 5280.
- Buccatrix citarella,**
 development, association, food plants, *Myrica gale* 9159.
- Buccatrix pyriorella,**
 effects on host plants, leaf fall, photosynthesis, *Pyrus communis* 7745.
- Buchloe dactyloides,**
 pests, host plants, new records, *Aegyptobia nomis* 2066.
- Buicides erichsoni,**
 new species, taxonomy, morphology, Ecuador 8758.
- Bufo caroli,**
 insecticides, systems, chemical control, *Bemisia tabaci*, *Empoasca kraemer* 6196
- Buffers,**
 effects on longevity, aging, *Drosophila melanogaster* 3452.
- Buildings,**
 damage, control programs, tropical environment, *Isopora* 2967
 pest control, repellents, *Formicidae* 5378
 pests movements, urban environments, *Blattella germanica* 8436
- Bulimulus singaporensis,**
 chemical composition, defence secretions, taxonomy 2609
- Bulgaria,**
 new records, geographical distribution, morphology, aedeagus, *Apion lethierryi*
Apion angusticollis, *Apion assimile* 4710
 new species, taxonomy, morphology, *Lepidoptera digna* 8785
 new subspecies, taxonomy, morphology, *Trichura veranae witti* 4046
 parasites, cattle, surveys, *Anthropoda* 4497
- Bunaea alcinoe,**
 developmental stages, morphology 7262
- Bunaeotus,**
 new genera, morphology, Panama 1634
- Bunyavirus,**
 infection, *Ixodes unac* 3396
- Buoyancy,**
 oxygen exchange, hemoglobin physiology, aquatic animals, *Anisopis assimilis* 1743.
- Buprestis pinarius,**
 host-parasite interactions, parasitoids, *Poeciloscus cothurnatus*, Netherlands 5179
 parasites, host searching behavior, oviposition, *Poeciloscus cothurnatus* 2020
- Buprestidae,**
 infestation, mortality, *Coniferales*, USA, Colorado 7551
 keys, morphology, taxonomy 7955
 taxonomy, synonymy 6378
- Buprestis splendens,**
 taxonomy 1983
- Burenella dimorpha,**
 infectivity, larvae, *Solenopsis geminata* 279
- Burnt ground,**
 heads, feeding behavior, food organisms, *Hepialus juveniles*, *Pyrrhocora pyrrhocora* 9827.
- Burrowing behavior,**
 activity patterns, diel variations, *Geolyca domestica* 1186
 defense mechanisms, prey attraction, *Cicindela willisoi*, USA, Arizona, Sulphur Springs Valley 5888
 larvae, pupation, *Dytiscus verticalis* 5155
 nesting behavior, dunes, *Colletes daviesanus*, Germany, Fed. Rep. 7804
 pit construction, soil temperature, light intensity, *Myrmecol immutatus* 6223.
 population density, seasonal variations, *Brachytrupes portentosus*, India, Nagaland, Medziphema 4447
 substrate preferences, spatial distribution, streams, larvae, *Progomphus obscurus*, *Gomphomphus externus* 7023
- Burrowing organisms,**
 environmental impact, nitrogen, sulfur, sediments, lakes, *Hexagenia* 8601
 occurrence, mummies, *Dermestes frischii*, *Dermestes ater* 2894
- Burrows,**
 community composition, spatial distribution, *Citellophilus tesquorum sungaris*, *Neosyllia bidentatiformis*, China, People's Rep. 2895
 nesting behavior, usurpation, *Crabro monticola* 9090
 sex pheromone, mating behavior, *Sphodrus abdon*, *Sphodrus rufipes* 6714.
- Bursaphelenchus ligniculus,**
 parasitism, effects on longevity, hosts, *Monochamus alternatus* 7623.

- Bombus fusca**, crop fields damage, agricultural practices, Zea mays 3748
sex pheromone, biochemical analysis, pheromone traps 3354
- Bothos judaicus**, venom, toxicity, *Sarcophaga falcata*, *Locusta migratoria* 5054
venom, toxins, effects on action potential, sodium currents, axons, *Periplaneta* 8182
- Bothus**, stings, edema, heart, case reports 9256
- Bothus famulus**, venom glands, morphology, cytochemistry 8981
- Bothus oceanicus**, toxicology, stings, effects on man, Switzerland, toxicology, stings, effects on man, scorpions 658
- Butonate**, insecticides, photoperiod, effects on sensitivity, *Musca domestica* 7419
- Buzara suppressaria**, biological control, infection, nuclear polyhedrosis virus, China, People's Republic, Hunan Province 2649
- Byrrhodes ovatus**, new species, taxonomy, morphology, USA 2400
- Bytneria aculeata**, host plants, association, *Phaeodo*, *Crematogaster* 7554
- Cacostola salicicola**, host plants, geographical distribution, USA, Texas 1944
- Cadmium**, effects on aging, temperature effects, *Drosophila melanogaster* 1037
radioisotopes, uptake, bioaccumulation, *Halobates neris*, *Halobates flaviventris* 936
uptake, nitrotriacetic acid chelation effects on, pollution indicators, *Hydropsyche* 6584
- Cadra cautella**, copulation, release factors, physical characteristics 408
- Cadrycia auratocanda**, parasites, *Sylepta derogata*, Nigeria, Ibadan 5938
- Caecilia ambulans**, new species, taxonomy, morphology, Portugal 8003
- Caecilius arundinis**, new species, taxonomy, morphology, Greece 8003
- Caeis candida**, new species, morphology, geographical distribution, Canada 1577
- Caeis rivulorum**, growth, productivity, life cycle 7012
- Caenobrutellia echinoflagellata**, new species, new genera, morphology, Brazil 1630
- Caenomedes inflex**, new species, taxonomy, morphology, Zaire 6413
- Caenomedes magniploa**, new species, taxonomy, morphology, Zaire 6413
- Caffeine**, effects on radiation resistance, genetic factors, *Drosophila melanogaster* 7042
- Cafius quadrimpressus**, defense secretions, chemical composition, pygidial gland, New Zealand 247
- Cages**, breeding, materials, Lepidoptera 5630
cross-pollination control, crop yield, *Aphis mellifera* 1280
effects on development time, *Drosophila melanogaster* 385
equipment, Acari 793
laboratory animals, entomofauna, Diptera, *Cavia porcellus* 638
mass rearing, effects on oviposition, egg production, *Anthonomus grandis grandis* 4086
materials, Tetranychidae 6473
methodology, feeding, host plants, viruses vectors, Aphididae 7253
oviposition, mass rearing, *Diatraea grandiosella* 3240
rearing, size effects on egg production, *Anthonomus grandis grandis* 8238
- Cajanus cajan**, crop fields, pests, Insecta 4553
cross-breeding, pollinators effects on, Insecta 1235
host plants, substrate preferences, oviposition, *Melanagromyza obtusa* 6674
pollination, crop production, *Frankliniella insularis*, Trinidad 737
- Caladomyia adalberti**, new species, South America, Amazon R. 4838
- Caladomyia castelnau**, new species, South America, Amazon R. 4838
- Caladomyia humboldti**, new species, South America, Amazon R. 4838
- Caladomyia kraussi**, new species, South America, Amazon R. 4838
- Caladomyia mulleri**, new species, South America, Amazon R. 4838
- Caladomyia ortoni**, new species, South America, Amazon R. 4838
- Caladomyia poppigi**, new species, South America, Amazon R. 4838
- Caladomyia spixi**, new species, South America, Amazon R. 4838
- Caladomyia alterniflorae**, new species, taxonomy, morphology, North America 3204
- Calcaromyobia**, parasites, new records, new species, Miniopertus, Africa 4766
- Calcium**, effects on enzymatic activity, fat body, *Periplaneta americana* 1759
ion exchange, distribution, digestive tract, Acrididae 239
ion exchange, muscles, physiology, *Locusta* 4122
neurochemistry, anterior median eye, sensitivity, illumination, *Menemerus confusus* 5667
regulation, mitochondria, mutants, *Drosophila* 8646
requirements, skeletal muscle fibers, action potential, *Carausius morosus* 111
skeletal muscle, inactivation, physiology, *Carausius morosus* 4124
uptake, sarcoplasmic reticulum, muscles, *Blaberus fuscus* 112
- Calcium channels**, hydrolysis phosphatidylinositol, salivary gland, *Insecta* 4950
- Calcium currents**, membrane potential, muscles, *Carausius morosus* 8904
- Calcium gluconate**, bites treatment, venom, *Latreductus* 1319
- Calcium transport**, membranes, salivary gland, *Phormia* 1978
- Caleda captiva**, reproductive isolation, allozymes, differentiation, chromosomes, polymorphism 3924
- Caleda captiva**, races, chromosomes, population genetics 3111
- Caledonia**, new species, taxonomy, morphology 810
- Caledononoma**, taxonomic revision, New Guinea 4806
- Caledononoma papuana**, new species, taxonomy, morphology, New Guinea 4806
- Calicidae**, chemical control, control programs, Czechoslovakia 2930
- California encephalitis virus**, transmission (transovarial), temperature effects on, *Aedes dorsalis*, *Aedes melanion* 9236
- Caliepteria**, taxonomic revision, morphology 5597
- Calicoriza producta**, development rate, temperature 4265
population dynamics, competition, pools, *Arctocoriza carinata* 6004
- Calimnetopodes albomaculatus**, new species, new genera, Sri Lanka 3182
- Calling behavior**, auditory communication, geographical variations, reproductive isolation, *Muellerianella* 8266
auditory communication, Gryllidae 4309
females, photoperiods, males, effects on, *Trichoplusia* ni 1881
mating behavior, *Antheraea yamamai*, Japan 1910
mating behavior, *Heliothis virescens* 1900
mating behavior, light intensity, temperature effects, females, *Chilo suppressalis* 3531
pheromone emission, prostaglandins, reproductive organs, *Trichoplusia* ni 8097
pheromone emission, *Pseudaletia unipuncta* 5873
reproductive behavior, *Chrysopa oculata*, *Chrysopa chi* 5853
sexual behavior, *Anticarsia gemmatilis* 1924
sound production, reproductive isolation, *Nephotettix cincticeps*, *Nephotettix virescens*, *Nephotettix nigropictus*, *Nephotettix malayanus* 7498
stridulation, courtship, males, *Ligyrocoris diffusus* 1904
- Calliphora erythrocephala**, aerodynamic properties, flight 888
epidermis, segments, gap junctions, membrane permeability 8901
eye, cells, cytology 3288
eye, ultrastructure, ommatidia, visual perception, light, polarization 4967
flight muscle respiration, enzymatic activity, temperature effects 169
gravity perception, neurophysiology 7299
insecticides, dielkrid, metabolism, microorganisms, cuticle 5799
optomotor response, electrical stimulation, ganglia, flight 894
quantitation, embryology, mitosis 1078
RNA biosynthesis, mRNA, poly (A)-containing, poly (A)-lacking, oogenesis 8244
hRNA, ribonucleoproteins structure, electron microscopy 7839
vitellogenin, vitellin, biosynthesis, fat body 6550
- Calliphora stygia**, photoreceptors, response, light intensity, adaptations 4969
- Calliphora vicina**, antennal sensilla, chemoreceptors, ultrastructure 6529
diapause, activation, neurosecretion, brain cells 6639
pupation, feeding, starvation, 20-hydroxy-ecdysone effects on, larvae 7455
vitellogenin, vitellin, purification, characterization 177
- Calliphora vomitoria**, brain peptides, amino acid composition 7290
cardiovascular system physiology, motor activity, visual stimuli effects on 4146
habitation, retention, cardiac conditioning 428
immunohistochemistry, peptides, characterization, brain 2531
pancreas proteins, biochemical characteristics, brain isolation, pancreas, proteins, biochemical characteristics, brain isolation, *Calliphora vomitoria* 963
- Calliphoridae**, appetitive conditioning 9078
pollution effects, bioaccumulation, mercury, methylmercury 7354
protein biosynthesis, flight muscle, mitochondria, cytoplasm 2567
pupae, growth, muscles, enzymatic activity 2718
species, symbionts, man, *Sarcophagidae* 9259
- Calitris**, host plants, *Pocillocooccus longilobus*, Australia 827
- Callosamia**, reproductive isolation, sympatric populations 5247
- Callosamia angulifera**, reproductive isolation, sympatric populations, *Callosamia securifera* 5247
- Callosamia promethea**, dispersal, flight 7590
larvae, food plants, associations, cocoons, USA, Michigan 2070
reproductive isolation, sympatric populations, *Callosamia securifera* 5247
- Callosamia securifera**, endangered species, abundance, population decline, conservation, North America 2106
reproductive isolation, sympatric populations, *Callosamia promethea* 5247
- Callosobruchus**, eggs, morphology, identification, host plants 5641
- Callosobruchus analis**, stored products pests, pesticide resistance 1068
- Callosobruchus chinensis**, chemosterilants effects on fertility, sex differences 1066
diel variations, age composition, population density, mathematical models 8371
growth, development, *Vigna mungo* flour effects on 7763
growth, metamorphosis, amino acids, lipids 5672
larvae, metamorphosis, growth, amino acid pools, glycogen, lipids 2712
mortality, population density effects on 5231
oviposition, substrate preferences, host plants 7495
pest control, insecticides, stored products 7669
pest control, oils, crop fields, *Vigna unguiculata* 2261

- Callosobruchus chinensis**, (continued)
 pest control, stored products, insecticides persistence 7770.
 pest resistance, host plants, extracts, *Vigna mungo*, *Lens culinaris* 7766
 stored products pests, pesticide resistance 1068.
 susceptibility, fumigants, food plants effects on, stored products pests 7672.
- Callosobruchus maculatus**,
 adaptations, host plants association, oviposition 1248
 age effects, enzymatic activity, esterase, metabolism, aging 4238
 chemical control, insecticides, topical applications, toxicity, comparison 5781.
 diet variations, age composition, population density, mathematical models 8371.
 food organisms, food preferences, *Thanasimus dubius* 6014.
 mortality, population density effects on 5231
 oviposition, markers, host selection, legumes 1899
 oviposition, reproductive behavior, sex linkage, inheritance 5483.
 oviposition, substrate preferences, host plants 7495.
 pest control, insecticides, stored products 7669.
 pests, growth, development, food plants effects on 7737.
 predator-prey interactions, exploratory behavior, host selection, parasitoids.
Anisopteromalus calandraceae 4367.
 storage, insecticides, malathion, DDT, lindane, carbaryl, dichlorvos, efficacy 7686.
 stored products pests, development, life cycle 5314.
 stored products pests, pesticide resistance 1068.
- Callosobruchus rhodesianus**,
 stored products pests, pesticide resistance 1068.
- Calmodulin**,
 proteins, biochemical analysis, *Schistocerca gregaria* 3335.
- Calocoris norvegicus**,
 chemical control, field trials, insecticides 8476.
- Caloglyphus kramerii**,
 pests, new records, seeds, *Zea mays*, India, Punjab 7735.
- Calolampra**,
 taxonomy, morphology, keys 4903.
- Caloneuroda**,
 paleoecology, Upper Carboniferous, USA, Pennsylvania 2376.
- Caloptera discipans**,
 mating behavior, copulation 1911.
- Calopteryx tornata**,
 territorial behavior, dispersal, Japan, Fukuoka, Muromi R. 8612.
- Caloptilia octopunctata**,
 taxonomy, morphology, morphology, *Caloptilia tetraplya* 7219.
- Caloptilia rufipennis**,
 geographical distribution, range, British Isles 6314.
- Caloptilia tetraplya**,
 taxonomy, synonymy, morphology, *Caloptilia octopunctata* 7219.
- Calories**,
 pollen, *Apis mellifera* 8928.
- Callosobruchus maculatus**,
 growth, development, *Lens culinaris* flour effects on 7772.
- Calpodus ethiuis**,
 accessory gland, duplex, anatomy, histology 9040.
 ejaculatory duct complex, histology, cytology 9041.
 genital tract, anatomy, function, constrictions 9038.
 interspecific relationships, host plants, *Canna edulis*, Mexico, Sinaloa, Mazatlan 5967.
 protein biosynthesis, hemolymph, developmental stages, fat body sequestering 6557.
 spermiogenesis, eupyrene, apyrene 9064.
 testis development, spermatogenesis 9065.
- Calyptera**,
 new species, new genera, China, People's Rep. 3197.
- Calyptomyrmex**,
 taxonomy, revision, identification keys, Ethiopian Region 1652.
- Calyptopogon**,
 keys, taxonomy, morphology, geographical distribution 26.
- Calyptrae**,
 occurrence, species composition, British Isles, England, West Bromwich, Sandwell Valley 9444.
- Camacopalpus**,
 taxonomy, morphology 4111.
- Camarothorax hemimicro**,
 new species, morphology, Mascarene Is., Reunion I. 4877.
- Camellia sinensis**,
 crop fields, pests, factors affecting abundance, species richness, Arthropoda 4574.
 crop fields, soil, species composition, abundance, Arthropoda 5428.
- Camelus dromedarius**,
 pathology, infestation 6891.
- Cameraria**,
 population density, population regulation, host plants, *Quercus nigra* 2134.
- Cameras**,
 methodology, night activity, Insecta 3247.
- Cameroon**,
 new records, *Derovatellus* 4781.
- Cannula pellicula**,
 pest control, pathogens, baiting, 1398.
- Campephiloptes**,
 new genera, taxonomy 7144.
- Campephiloptes atyeoi**,
 new species, taxonomy, morphology, South America 7144.
- Campephiloptes paraguayensis**,
 new species, taxonomy, morphology, South America 7144.
- Camptelasma chloridacea**,
 parasitism, effects on hemolymph amino acids, *Heliothis armigera* 1022.
- Camptelasma sonorensis**,
 parasitoids, competition, *Heliothis virescens* 2811.
- Camptelasma**,
 viruses, isolation, DNA characterization 8122.
- Camptelasma**,
 acetylcholine, nervous system 1735.
- Camptelasma**,
 epizootics, infestation, *Cordyceps unilateralis*, Brazil, Amazonas 5023.
- Camponotus compressus**,
 food preferences, gustatory stimuli, urea, sugars 8301.
- Camponotus ephippium**,
 trail pheromone glands, morphology 8978.
- Camponotus leica**,
 interspecific relationships, association, eggs, *Ellice puno* 7585.
- Camponotus itoi**,
 geographical distribution, check lists, Korea 3146.
- Camponotus laevigatus**,
 competition, nests, displacement, *Formica baemorrhoidalis* 6855.
- Camponotus lateralis**,
 neuroendocrine system effects on oogenesis 2706.
- Camponotus olivieri**,
 association, effects on ecological distribution, *Catalacus guineensis*, Ghana 578.
- Camponotus pennsylvanicus**,
 aggregation pheromone, swarming behavior 9074.
 baits, attractancy, growth regulators, pest control 8969.
 nests, infestation, trees, damage, USA, New Jersey 8480.
- Camponotus vagus**,
 colonial characteristics, foraging behavior, feeding behavior, food intake 2271.
- Camponoplaginae**,
 morphology, instars 8034.
- Camponoplex frustranae**,
 parasitism, *Pinus taeda* 1229.
- Camponoplex**,
 parasitoids, association, competition, *Lixophaga medioris*, *Eurytoma pini* 9140.
- Camposomeris completa**,
 abundance, phenology, geographical distribution, USA, Texas, Rio Grande Valley 1975.
- Camposomeris ephippium**,
 abundance, phenology, USA, Texas, Rio Grande Valley 1975.
- Camposomeris hesterae**,
 new record, geographical distribution, USA, Texas, Rio Grande Valley 1975.
- Camposomeris luteola**,
 abundance, phenology, geographical distribution, USA, Texas, Rio Grande Valley 1975.
- Campeurus**,
 benthos, Venezuela, Valencia L. 621.
- Canace**,
 occurrence, morphology, Israel 4834.
- Canace actives**,
 occurrence, morphology, Israel 4834.
- Canacidae**,
 occurrence, keys, Israel 4834.
- Canada**,
 adaptations, cold tolerance, survival, polar environments, Insecta 980.
 alpine environments, cold tolerance adaptations, Insecta 8103.
 benthos, Chironomus, community composition, correlation, algae 2295.
 environmental surveys, wetlands, aquatic animals, Insecta 1970.
 forest, damage, pests, *Choristoneura fumiferana* 1779.
 geographical distribution, new records, new species, *Epibremiptera* 1577.
 geographical distribution, occurrence, *Cicadella* 9496.
 morphology, redescription, *Vetastopus brevicaudus* 7272.
 new records, geographical distribution, *Cnephasia stephensiana* 8699.
 new records, geographical distribution, *Phlopius confusus*, *Orthotylus nastatus*,
Orthotylus viridicervus 4741.
 occurrence, abundance, pheromone traps, *Hyaliopus rufipes*, *Scolytus tsugae* 1183.
 pest control, economics, *Phyllotreta*, *Brassica campestris* crop fields 8534.
 snow-shoe hare virus isolation, *Aedes communis* 1017.
 taxonomic revision, identification keys, geographical distribution.
Rhyacophilidae 6462.
 taxonomy, morphology, keys, *Ennominae* 5654.
 weed control, biological control, galls, *Cirsium arvense*, *Urophora cardui* 3805.
- Canada, Alberta**,
 colonial characteristics, selection, phenotypes, *Apis mellifera* 9433.
 feeding behaviors, food preferences, pollen, colonies, *Apis mellifera* 2010.
 geographical distribution, zoogeography, *Lepidoptera* 7916.
 larvae, morphology, *Baetis dardanus* 2497.
 life cycle, diets, nymphs, *Coenagrion resolutum*, *Lestes disjunctus* *disjunctus* 3056.
 new records, parasites, *Spinturnix globosus*, *Myotis lucifugus* 5192.
 parasites, aggregation, habitat, larvae, *Dermacentor albipictus* 9181.
 pests, infestation, Delta, *Brassica campestris* 8479.
 winter survival, aggregation, *Hippodamia quinquevittata* 3637.
- Canada, Alberta, Biggar R.**,
 emergence, phenology, community composition, abundance, Chironomidae 752.
- Canada, Alberta, Bow R.**,
 species composition, abundance, sewage effluents, dams effects on, Plecoptera 9408.
- Canada, Alberta, George L.**,
 species composition, geographical distribution, Symphyta 7818.
- Canada, British Columbia**,
 check lists, new records, host plants, Aphididae 5524.
 control programs, sterile-release, orchards, *Cydia pomonella* 3815.
 introduced species, geographical distribution, *Psalis salicellus* 4007.
 new records, geographical distribution, *Dasyhelea oppressa*, *Mycetobia divergens* 5526.
 new species, taxonomy, morphology, *Euxoa castanea* 8839.
 new species, taxonomy, morphology, *Platygaster rhesi* 4007.
 pest control, environmental impact, population density, nuclear polyhedrosis virus, *Bacillus thuringiensis*, *Choristoneura occidentalis* 4589.
 streams, pollution effects, toxicity, larvae, Insecta 315.
 surveys, pathogens, granulosis virus, *Choristoneura conflictana* 4196.
- Canada, British Columbia, Riske Creek**,
 habitat, morphology, larvae, *Symptetrus madidum* 6495.
- Canada, British Columbia, Vancouver I.**,
 food preferences, feeding behavior, adults, *Alnus rubra*, *Rhinosimus viridianaensis* 2769.
 surveys, pheromone traps, aggregation pheromone, sulcatol, *Gnathotrichus sulcatol* 5387.
- Canada, Manitoba**,
 ectoparasites, surveys, Arthropoda, *Pediceptes phasianellus* 1230.
 geographical distribution, occurrence records, *Thymelicus lineola* 3159.
 geographical distribution, occurrence, *Vespa germanica*, *Vespa vidua* 3931.
 geomorphology, effects on species diversity, peninsular effect, Carabidae 5125.
 pheromone traps, catches, variations, *Scotogramma trifolii* 4337.
- Canada, Manitoba, Delta Marsh**,
 parasites, *Tyrannus tyrannus*, *Tyrannus verticalis*, new records, Mallophaga, *Acarina*, *Hippoboscidae* 514.
- Canada, New Brunswick**,
 new genera, new species, taxonomy, morphology, *Mitosynum vockerrothi* 7935.

Canada, New Brunswick, (continued)

new records, geographical distribution, *Cicindela longilabris* 9496.
 pest control, atmospheric conditions, dispersal, *Choristoneura fumiferana* 705.
Canada, Newfoundland,
 geographical distribution, new records, range extension, Carabidae, *Cicindelidae* 800.

new records, geographical distribution, *Brachystola magna* 3160.
 new records, geographical distribution, *Lymantia dispar* 8692.
 new records, geographical distribution, range extension, *Culiceta melanura* 6331.
 range extension, geographical distribution, *Polygona comma* 5523.
 wildlife management, wildlife conservation, plant communities, *Lepidoptera* 2107.

Canada, Northwest Territories,

new species, new genera, taxonomy, morphology, *Donicotopus bicandatus* 4826

Canada, Nova Scotia,
 new records, geographical distribution, range extension, *Pezomachus alchemillata* 7119.

Canada, Ontario,

biological control, weeds, *Cirsium arvense*, *Centothyrus litura* 2952.
 emergence, diel variations, environmental effects, streams, *Chironomidae* 6224.
 genitalia, anatomy, identification, *Xestia dolosa*, *Xestia adela* 2687.
 geographical distribution, *Boreus nivonudus*, *Boreus brunellus* 7114.
 geographical distribution, occurrence records, *Thymelicus lineola* 3159.
 host plants, association, *Convolvulus sepium*, *Insecta* 6794.
 host plants, infestation, *Phymata wolfi*, *Daucus carota* 6796.
 life history, emergence, developmental stages, *Agromyza frontella* 2782.
 mortality, overwintering, crop fields, *Coleomegilla maculata lengi* 6021.
 new records, geographical distribution, *Pauropoda* 8691.
 new records, parasitism, eggs, *Ptychoneura*, *Rhopalum clavipes* 4377.
 new species, new genera, taxonomy, morphology, *Arborichthonius styosetosus* 5546.
 pests, sampling, pheromone traps, *Spodoptera frugiperda* 8555.
 population genetics, genetic variance, allotypes, *Xestia adela*, *Xestia dolosa* 8660.
 population studies, range extension, *Epidemia dorcas* 9492.
 resource partitioning, *Silphidae* 9209.
 surveys, pathogens, granulosis virus, *Choristoneura conflictans* 4196.
 temperature effects, hatching, occurrence, seasonal variations, *Hypera postica* 2775.

Canada, Ontario, Salem Creek,

species diversity, ecological distribution, abundance, *Diptera* 3856.

Canada, Ontario, Windrow Farm Stream,

diel phenology, emergence, factors affecting, light, water temperature, *Chironomidae* 8604.

Canada, Prairie Provinces,

apiculture, honey production 8523

Canada, Prince Edward I.,

new records, geographical distribution, *Cicindela longilabris*, occurrence 9496.

Canada, Quebec,

cold temperature, winter mortality, eggs, *Lymantia dispar* 2127.
 forests, infestation, mortality, *Choristoneura fumiferana*, *Abies balsamea*, *Picea glauca* 3036.

habitat, feeding behavior, larvae, streams, *Pycnoscyphus guttifer* 6227.

habitat selection, spatial distribution, bogs, sub-polar environments, *Aedes* 6043.

hematophagy, cattle, *Chrysops*, *Hybomitra*, *Tabanus* 2802.

larvae, chemical control, aminocarb, *choristoneura fumiferana* 1447.

pests, predation, larvae, eggs, *Ambystoma maculatum*, *Chironomidae* 1203.

rodentia parasites range extension, *Anoploa*, *Acan* 4386.

sexual reproduction, life history, interspecific relationships, host plants, *Sarracenia purpurea*, *Eriodictyon deekenii* 4328.

Canada, Quebec, Beauharnois,

predation, effects on population levels, pests, *Agelanus phoeniceus*, *Ostrinia nubilalis* 5262.

Canada, Quebec, La Grande R.,

production, ecological distribution, larvae, *Aedes* 567.

Canada, Quebec, Matane R.,

morphology, case construction, diets, variations, environmental factors, *Pycnoscyphus guttifer* 8605.

Canada, Saskatchewan,

apiculture hives, occurrence, *Megachile relativa*, *Megachile nivalis* 4603.

geographical distribution, occurrence, *Phyllotreta* 5531.

pests, abundance, crop fields, *Phyllotreta cruciferae*, *Phyllotreta albionica*, *Phyllotreta punctulata* 8482.

pests, wind dispersal, *Homocidus electellum*, USA, Gulf Coast 2100.

range, geographical distribution, habitat preferences, *Phyllotreta striolata* 4335.

strike, mortality, *Wohlfahrtia opaca*, juveniles, *Anas clypeata*, *Anas discors* 5190.

Canalasia, phenotypes, adaptations, *Nymphalis antiopa hyperborea* 7878.

Canary Is.,

new species, taxonomy, morphology, *Paralimosina anaptera*, *Paralimosina franzi*, *Paralimosina gomerensis*, *Paralimosina piliferomorata* 7969.

Canary Is., Grand Canary, geographical distribution, *Euchloe belemia hesperidum* 7067.

Canary Is., Tenerife,

new species, taxonomy, morphology, *Tingis canariensis* 4855.

Canary Islands,

new species, taxonomy, morphology, *Apteroglyptis gilvipes* 849.

Canavanine,

effects on water balance, *Locusta migratoria migratoria* 3370.

L-Canavanine,

effects on arginine catabolism, *Manduca sexta* 1763.

host plants defense mechanisms, effects on midgut epithelium, *Manduca sexta* 4391.

Candida guilliermondii, gastrointestinal tract, larvae, enzymatic activity, *Phoracantha semipunctata* 941.

Candida sonorensis, food preferences, foraging behavior, *Drosophila mojavensis* 4342.

Candida tenuis,

gastrointestinal tract, larvae, enzymatic activity, *Phoracantha semipunctata* 941.

Canidae,

Susceptibility, disease transmission, parasites, *Sarcoptes scabiei* 1331.

Canis,

infestation, abundance, seasonal variations, *Ixodidae* 4514.

infestation, case reports, *Cordylobia anthropophaga*, Kenya 4515.

Canis familiaris,

Alopecia, case reports, infestation, *Kleemannia plumosus* 7643.

Canis familiaris, (continued)

hypersensitivity, bites, *Siphonaptera* 2910.
 hypersensitivity, parasites, antigens, skin tests, *Siphonaptera* 8406.
 infestation, case reports, *Linognathus setosus*, USA 2909.
 infestation, case reports, *Pneumonyssoides caninum*, USA, Illinois 7641.
 insecticides, systemic, chemical control, *Triatoma infestans* 6059.
 parasitism, new records, *Sarcoptes scabiei* var *hominis* 7638.
 pest control, repellents, thiamine, *Siphonaptera* 7636.
 vectors, disease transmission, *Dirofilaria immitis*, *Aedes sierrensis*, USA, California 6073.

Canis familiaris,

Susceptibility, disease transmission, parasites, *Sarcoptes scabiei* 1331.

Canis latrans,

Susceptibility, disease transmission, parasites, *Sarcoptes scabiei* 1331.

Canis lupus,

Susceptibility, disease transmission, parasites, *Sarcoptes scabiei* 1331.

Canna edulis,

host plants, interspecific relationships, *Calpodus ethilius*, Mexico, Sinaloa, Mazatlan 5967.

Cannibalism,

conspecifics, *Philonthus basilaris* 6740.

developmental stages, spatial distribution, ponds, *Notonecta lunata*, *Notonecta undulata* 7017.

feeding behavior, larvae, *Diarsia obliqua* 1209.

population regulation, colonies, queens, *Hymenoptera* 1479.

predator-prey interactions, prey population density, *Paratenodera angustipennis* 3642.

predatory behavior, prey abundance, predator-prey interactions, *Adalia bipunctata*, *Eucallipterus tiliae* 8298.

starvation survival, developmental stages, *Mallos gregalis* 1212.

Canopies,

forests, community composition, nutrient content, *Anthropoda*, USA, North Carolina 2144.

Cantharidae,

feeding behavior, association, flowers, *Liriodendron tulipifera*, USA, New York 5966.

Canthyluscelidae,

geographical distribution, new records, Sweden 3945.

Cape Verde Islands,

new species, taxonomy, morphology, *Italoichrysa lobini*, *Anisochrysa teiresias*, *Suaris piersi* 4059.

Capnia confusa,

trophic status, food preferences, feeding, food conversion, USA, Colorado 3855.

Capra,

parasites, chemical, control, karanj oil, *Sarcoptes scabiei* 8407.

Capra hircus,

parasites, morphology, *Bovicola caprae* 8335.

Capromyidae,

parasites, new species, *Androlaelaps capromyidis*, *Ornithonyssus garriodii*, Cuba 8720.

Capsicum annum,

crop fields, pests, *Melanotus*, India, Dharwad 5365.

roots, pest control, insecticides, *Insecta* 7695.

Capsicum annum,

damage indicators, age, trapping, *Ostrinia nubilalis* 8514.

Capsicum frutescens,

extracts, toxicity, *Sitophilus oryzae* 1065.

Capsules,

beads, ultrastructure, larvae, *Chironomidae* 104.

Capture,

efficiency, comparison, pheromones traps, *Ips typographus*, Sweden 719.

efficiency, light effects, dark, predator-prey interactions, *Chaoborus punctipennis*, *Copepoda* 489.

efficiency, pheromone traps, age, density, saturation, monitoring, *Choristoneura* 1679.

predatory behavior, *Serratruema serrula* 6741.

Capture-recapture studies,

autogeny, blood meals, feeding, oviposition, *Culex tarsalis* 6745.

dispersal, age, seasonal variations, *Anopheles culicifacies*, Sri Lanka 5979.

dispersal, gonotrophic cycles, survival, females, *Aedes africanus*, Uganda 1295.

dispersal, host plants, larvae, *Lymantia dispar* 6813.

dispersal, sexual dimorphism, *Tetrastropes tetrastrophthalmus*, *Tetrastropes femoratus* 6816.

Eucelatoria armigera, parasites, *Heliothis armigera*, establishment, infestation, India, Bangalore 2159.

flight range, vectors, African trypanosomiasis, *Glossina fuscipes* quanzensis, Congo, People's Rep. 4490.

habitat preferences, population density, *Harpalus pennsylvanicus* 1174.

marking, mating behavior, *Glossina moritans* 1141.

marking, *Melalgaria galathea* 6699.

marking methodology, europium, *Myrmica rubra*, *Myrmica scabrinodis*, *Lasius niger* 6981.

marking methodology, survival, *Henosepilachna vigintioctopunctata* 3245.

marking, population density, models, *Stomoxys calcitrans* 590.

population dynamics, mating behavior, *Anopheles culicifacies*, Pakistan 7602.

sampling methods, population density estimation, Lincoln Index, *Dacus oleae* 5621.

seasonal variations, population density, survival, *Tenebrionidae* 595.

sex pheromone pheromone traps, simulation models, *Plutella xylostella* 218.

traps, pheromone, bait, distribution, dispersal, survival, *Lymantia dispar* 854.

Carabidus andreae,

new species, taxonomy, morphology, *Carabidus*, Australia, Victoria 2405.

Carabidae,

abundance, species composition, crop fields, USA, Michigan 3772.

activity patterns, seasonal variations, forests, USSR 6716.

agricultural practices, effects on abundance, species richness 8463.

check lists, species composition, Hungary, Bekecs 8683.

chemical control, insecticides, crop fields 1394.

community composition, stability, forests, France 6824.

feeding adaptations, predatory behavior types, ecological distribution, Italy 4446.

geographical distribution, new records, range extension, Canada, Newfoundland 8700.

geomorphology, effects on species diversity, peninsular effect, Canada, Manitoba 5125.

habitat preferences, seasonal variations, Glycine max 1174.

Laboulbeniales parasitism, new records 5990.

Carabidae, (continued)

- leg, morphology, locomotion 8063.
 new species, taxonomy, morphology, Nepal 4798.
 nonpest organisms, insecticides, pirimiphos-methyl, effects on population levels, Czechoslovakia, Jerske Hory Mts. 7571.
 pest control, herbicides, toxicity 9021.
 pest control, isofenphos 9320.
 pests, species composition, crop fields, Triticum, USSR, Ukraine 6919.
 predator-prey interactions, effects on population levels, dispersal, Myzus persicae, British Isles 839.
 predators, biological control, pest control, Diabrotica 6086.
 predators, pest control, Delia brassicae 2210.
 predators, population dynamics, British Isles, England 8387.
 prey, urban environments, Ernaeus concolor, Czechoslovakia, Brno 5987.
 seasonal variations, occurrence, spatial distribution, crop fields, Sweden, Uppsala 4543.
 species composition, agricultural land, Belgium 9324.
 species composition, check lists, Europe 9463.
 species composition, occurrence, France, Cerdagne 9473.
 species composition, seasonal variations, habitat preferences, population structure, sex ratio, reproductive status, New Zealand, Banks Peninsula 6868.
 taxonomy, morphology, new species, Asia 3984.
 trapping, methodology 8859.
Carabodes hungaricus, morphology, taxonomy 8053.
Caraboides, karyotypes, chromosomes, Spain 3890.
 meiosis, chromosomes 3889.
Carabus, taxonomy, morphology, synonymy 8772.
Carabus glabratus, life cycle, life span, British Isles, England 5894.
Carabus limbatus, forests, clear cutting, effects on competition, food sources, Carabus sylvosus 8367.
Carabus problematicus, life cycle, life span, British Isles, England 5894.
Carabus rutilans jeanneli, new subspecies, taxonomy, morphology 8771.
Carabus sylvosus, forests, clear cutting, effects on competition, food sources, Carabus limbatus 8367.
Carabus taedatus, forests, fires, environmental change, effects on species composition 6840.
Caratenois, biochemical analysis, Apis mellifera 4157.
Carautus, ventral gland, ultrastructure, development, embryogenesis 6596.
Carautus morosus, coloration, pigments migrations, role, ATP pyrophosphatase 3363.
 eggs, shells, minerals 6633.
 electrophysiological recording, feedback control, leg muscles 890.
 hormones, β -ecdysone, effects on physiology, follicles 4263.
 locomotor activity, feedback control, leg, muscles 889.
 motor activity, nervous system effects on 117.
 muscles, membrane potential, calcium currents, potassium currents 8904.
 skeletal muscle fibers, action potential, calcium requirements 111.
 skeletal muscle, inactivation, physiology, calcium 4124.
 spermatogenesis, chromosomes duplication 6266.
Carbamate, insecticides, pesticide resistance, strains, Musca domestica 4233.
 insecticides, synergism, isodilapolyol alcohol, toxicity, Tribolium castaneum 7416.
 pesticide resistance, development, Nilaparvata lugens 320.
Carbaryl, chemical control, treatment, man, Pediculus humanus capitis 3665.
 effects on community composition, soil, Arthropoda, USA, California 2149.
 insecticides, chemical control, efficacy, Heliothis consanguinea 7792.
 insecticides, dusts, efficacy, Amrasca biguttula biguttula 7749.
 insecticides, storage, efficacy, Callosobruchus maculatus, Callosobruchus chinensis 7686.
 insecticides, toxicity, Dendroctonus brevicornis, Enoclerus lecontei, Temnochila chloridea 4228.
 insecticides, toxicity, Leucophaea maderae 1846.
 insecticides, toxicity, Phyllonorycter blancardella, Apatenites ornatus 8200.
 pest control, Dendroctonus brevicornis, Pinus ponderosa 8525.
 pesticide residues, Cicer arietinum, chemical control, Helicoverpa armigera 7773.
 pollution effects, upland, Culex pipiens 4219.
 toxicity, effects on enzymatic activity, pesticide resistance, Labops 1841.
 toxicity, effects on esterase polymorphism, Chorionura occidentalis 8202.
 toxicity, Myzus persicae, Coleomegilla maculata lengi, Chrysopa oculata 318.
Carbarylur, chemical control, pest control, Athegona soccata 5358.
 diets, mortality, Apis mellifera 6201.
 insecticides, chemical control, efficacy, Orseolia oryzae, Scirpophaga incertulas 7771.
 insecticides, effects on females fecundity, Unapis euomyia 2651.
 insecticides, persistence, soil, crop fields 8521.
 insecticides, toxicity, pest control, nymphs, Nilaparvata lugens 1847.
 pesticide residues, soil, effects on larvae, Diabrotica longicornis, Diabrotica rugifera 3740.
 toxicity, chemical control, Athegona soccata 3003.
Carbohydrate composition, hemolymph, radiation effects on, Musca domestica 1753.
 larvae, juvenile hormones effects on, Chilo suppressalis 199.
Carbohydrate metabolism, diapause, glycogen, glycerol, Chilo suppressalis 3482.
 enzymatic activity, cocoons, Bombyx mori 2561.
 enzymatic activity, digestive tract, Neotermes bosei 949.
Carbohydrates, biochemical analysis, diapause eggs, metabolism, Atrachya menetriesi 1098.
 diets, phospholipid composition, Exeristes roborator 3313.
 digestive tract, enzymes, Sacrophaga albipes 7311.
 food utilization, metabolism, Oxyrhachia tarandus, Oxycaenus hyalinipennis 7309.
 hemolymph, comparative studies, hybrids, Apis mellifera 771.
 host plants, predators effects on, Agromyza frontella, Medicago sativa 552.

Carbohydrates, (continued)

- insecticides, lindane, topical applications, Periplaneta americana 5791.
Carbon, effects of diets, survival, longevity, reproduction, Dacus oleae 1109.
Carbon dioxide, atmospheric conditions, effects on feeding, Amyelois transitella, Plodia interpunctella 8278.
 attractancy, odor, Glossina morsitans morsitans, Glossina pallidipes 6084.
 dry ice, catching methods, sampling, Amblyomma americanum 3246.
 effects on hormones, developmental stages, Locusta migratoria cinerascens 3341.
 effects on males sexual behavior, Musca domestica 430.
 effects on pests vertical distribution, stored products, Oryzaephilus surinamensis, Sitophilus oryzae, Rhyzopertha dominica 1445.
 fumigation, toxicity, larvae, Anastrepha suspensa 1845.
 pest control, stored products, Insecta 1403.
Carbon disulfide, chemical control, pest control, Lepidoglyphus destructor, Triticum 8515.
Carbon tetrachloride, fumigation, effects on productivity, Trogoderma granarium 5763.
Carbonate dehydratase, enzymatic activity, diets effects on, Hyalophora cecropia 201.
Carboxylesterase, enzymatic activity, pesticide resistance, insecticides, Nephotettix cinctipes, Japan 5042.
Carboxylic acids, effects on host searching behavior, landing behavior, Myzus persicae 7343.
Carboxylic-ester hydrolase, alleles, temperature, reproduction fitness, males, Drosophila melanogaster 7474.
Carboxypeptidase, digestive enzymes, characterization, Attaegusa megatoma 1765.
 digestive tract enzymes, diets, Rhodnius prolixus 1760.
Carcelia lagoae, parasites, hosts life cycle, Megalopyge opercularis 2027.
Caricinophoridae, new genera, new species, taxonomy, morphology, Ecuador 5563.
Caricinopyga lichenigera, genitalia, morphology 4045.
Caricinopyga lichenigera auytense, new subspecies, taxonomy, morphology, India 4045.
Caricinopyga proserpina, genitalia, morphology 4045.
Cardenolide, host plants, effects on oviposition, larvae survival, Asclepias humistrata, Danaus plexippus, USA, Florida 9154.
Cardiac conditioning, habituation, retention, Calliphora vomitoria 428.
Cardiac glycoside, permeability, midgut, Oncopeltus fasciatus, Schistocerca gregaria, Periplaneta americana 7310.
Cardiac muscle, litoralis, taurine, γ -D-glutamyl-L-tyrosine effects on, action potential, Locusta migratoria 241.
Cardiastethus saarensis, diets, food organisms, effects on development, oviposition 6651.
 pests, life cycle, feeding 6965.
Cardiostichus nigripes, parasitoids, competition, Heliothis virescens 2811.
 parasitoids, hosts kaurenomes, effects on oviposition, Heliothis virescens 5176.
Cardiostoma, parasites, vectors, Armigeres subulatus, Malaysia 6057.
Cardiotoxins, hemolymph, midgut, extracts, Mollusca, larval, Photinus 9018.
Cardiovascular system, physiology, visual stimuli, motor activity effects on, Calliphora vomitoria 4146.
Carduelis carduelis, parasites, morphology, Bruchia densilimba 8048.
 parasites, morphology, Menacanthus carduelis 8049.
Carduus, weed control, biological control, predators life history, Ceutorhynchus trimaculatus, Trichostrocalus horridus 1979.
Carduus nutans, weed control, environment management, Rhinocyllus conicus, Ceutorhynchidius horridus, USA, North Dakota 2208.
Carica papaya, fruit trees, ripening, effects on infestation, Dacus dorsalis, USA, Hawaii 4616.
 necrosis, rhabdovirus, disease transmission, Empoasca papayae, Venezuela 7660.
 pests infestation, factors affecting population density, Dacus dorsalis 8538.
Carinophobus zairensis, new species, taxonomy, morphology, Zaire 8767.
Carlus wahlbergi, defense secretions, biochemical analysis, chemical composition 5018.
Carludovica palmata, flowering, pollination, Meliponinae 9150.
Carnivores, diets, enzyme activity, digestive tract, Pterostichus nigrita 6544.
 feeding behavior, Drosophila melanogaster food organisms effects on, Sarraacina purpurata 1255.
Carnotia, taxonomic revision, new genera 2444.
Carotella beveriana, life history, USA, California 6722.
Carotenoids, metabolism, β - α -caroten-2-ol, β - α -caroten-2-one, Ectatosoma tatarum 172.
Carpinus graciliformis, new species, morphology 14.
Carpinus gracilis, morphology 14.
Carpocephalus lacticus, snitgens analysis 2913.
Carponia vesuviana, fruit trees infestation, damage, India 5332.
Carposiphium humeralis, bibliographies, taxonomy, taxonomic revision 7364.
Carposina niponensis, pest control, pheromone traps, fruit trees 2992.

- Carpocina niponensis**, (continued)
sex pheromone, synthesis 2596.
trapping, sex lures, Japan 5334.
- Carraeeneans**,
diets, rearing, nuclear polyhedrosis virus yield, *Lymantria dispar* 8008.
- Carbobotus xanthogramma**,
mating behavior, silk role 4294
- Carriers**,
inorganic compounds, insecticides, efficacy, *Atherigona soccata* 7795.
preferences, phoretic behavior, genetic variance, *Poecilochirus necrophorus* 8663.
- Carriou**,
attraction, abundance, species composition, *Silphidae* 5928.
community composition, succession, *Insecta*, Costa Rica 5166
feeding behavior, forests, Formicoidae, USA, East 4361.
location, foraging behavior, *Nicrophorus carolinus* 5924
traps, baiting, demography, *Arthropoda* 1694.
- Carsula yunnan**,
new species, morphology, China, People's Rep. 847.
- Cartecephalus palaemon**,
population decline, environmental conditions, British Isles 4470.
- Carthamus tinctoria**,
plant diseases, disease transmission, *Microplasma phylloidy*, *Neolaturus fenestratus* 8467.
- Carthamus tinctorius**,
crop fields, damage, pests, *Acanthophilus belati* 7779.
infection, *Mollusca* transmission, role, *Neolaturus fenestratus* 5346
- Cartomorphis**,
taxonomic revision, geographical distribution, Australia, New Zealand 4064
- Carulaspis juniperi**,
predators, range extension, geographical distribution, *Aleuropteryx juniperi*, USA 3944.
- Carventus hainanensis**,
new species, taxonomy, morphology, China, People's Rep. 4008
- Carvone**,
diets, effects on development, growth, *Spodoptera littoralis* 8231.
- Carya**,
nuts, new records, habitat, *Eurycoccus blanchardi* 5907
- Carya illinoensis**,
chemical control, trunk injection, *Microplitis nigropunctata*.
Monella caryella, *Tinocallis caryae-foliae* 8566
crops, feeding damage, *Monellipsis nigropunctata*, *Monella caryella*,
Melanocallis caryae-foliae 9345
damage, effects on growth, feeding, *Monellipsis nigropunctata*, *Monella caryella*, *Melanocallis caryae-foliae* 4587
orchards, damage, pests effects on, *Cureulio caryae* 2221
- Carya pecan**,
crop production, economic analysis, damage, *Cureulio caryae* 2265
host plants, growth, feeding effects on, *Monella caryella* 2091
pests, parasites, *Monella caryella*, USA, Texas 6155.
- Caryanda yunnan**,
new species, morphology, China, People's Rep. 847
- Caryedes brasiliensis**,
excretion, nitrogen, feces, detoxification, seeds 3436
- Caryedon**,
eggs, morphology, identification, host plants 5641
- Caryedon serratus**,
pest control, sterilization, γ radiation 7449.
- Caryocolum**,
taxonomy, morphology, Europe 4887.
- Caryophyllene**,
attractants, males, *Collops vittatus* 418.
- Cass construction**,
body size, habitat, geographical distribution, freshwater environments,
Limnephilidae 7607
- Cass**,
coconuts, composition, *Bombus atratus* 8982
variations, environmental factors, *Pycnopsycha guttifer*, Canada, Quebec, Matamek
R. 8605.
- Cass reports**,
Alopecia, infestation, *Klemania plumosus*, *Canis familiaris* 7643.
bites, histology, domestic animals, *Dermacentor* 4488.
bites, symptoms, therapy, *Arachnida* 668.
bovine demodicosis, *Demodex bovis*, *Nigera* 6075
contact dermatitis, man, *Coccinellidae* 3680
contact dermatitis, man, *Thaumetopae ptyocampa* 3694.
dermatitis, man, *Ornithonyssus bacoti* 1363.
disease transmission, exanthematous typhus, man, *Rhipicephalus sanguineus* 1332.
edema, heart, stings, *Buthus* 9256
hemolytic anemia, *Vespidae* stings, man 9231.
bone toxicity, *Rhododendron* pollen, *Apis mellifera*, Nepal 5321.
hypersensitivity, man, immunotherapy, *Triatoma protracta* 4521.
infestation, *Canis familiaris*, *Pneumonyssoides caninum*, USA, Illinois 7641.
infestation, *Cordylobia anthropophaga*, Kenya 4515.
infestation, *Linognathus setosus*, *Canis familiaris*, USA 2909.
infestation, *Lyxus radovskyi*, *Felis domestica*, USA, Florida 2922.
infestation, man, *Cuterebra* 4507.
infestation, wounds, man, *Diptera* 7642.
Lyme disease, man, vectors, *Ixodes dammini*, USA, Minnesota 4492.
man, occurrence, *Boophilus decoloratus*, *Rhipicephalus evertsi* evertsi, South
Africa 1367.
man, scabies, immunology, *Sarcoptes* 3691.
man, sebaceous gland infestation, *Demodex brevis* 3663.
ophthalmomyiasis, infestation, *Oestrus ovis*, USA, California 7644.
pathology, infestation, *Notodex cati*, *Felis rufus*, USA, Texas 3685.
scabies, association, herpes genitalis, man 3696.
scabies, disease transmission, *Sarcoptes scabiei* 1330.
scabies, Norway 8426.
scabies, *Sarcoptes scabiei*, Jamaica 6061.
scabies, skin diseases, Ethiopia 5273.
scabies, symptoms, histology, man 2185.
scabies, treatment 648.
sensitivity, venom, immunotherapy, man, *Insecta* 3686.
sepsis, infants, infestation, *Drosophila* 4500.
- Caseln**,
effects on pathogens growth, *Nomuraea rileyi*, *Noctuidae* 1812.
nutrients, rearing, media (culture), development, fecundity, *Corcyra cephalonica*
7452.
- Caseln**, (continued)
rearing, media (culture), growth index, larvae, *Corcyra cephalonica* 7467.
- Cassava**,
viruses, vectors, population levels, *Bemisia tabaci* 576.
- Cassava mosaic virus**,
plant diseases, vectors, *Bemisia tabaci* 7653.
- Caste determination**,
juvenile hormone, activity, corpora allata, *Phlebotomus* 7477.
- Caste differentiation**,
environmental effects, temperature, development, larvae, Pupae, *Polistes*
foederatus 4315.
queens, diets effects on, *Apis mellifera* 376.
social organization, feeding behavior, division of labor, *Pogonomyrmex owyhee*
2282.
- Castes**,
body size, polymorphism, colonial characteristics, *Solenopsis invicta* 2275.
chemical communication, trophallaxis, colonial characteristics, *Apis mellifera*
mellifera 6992.
colonial characteristics, geographical variations, *Cryptotermes brevis* 6999.
colonial characteristics, males production, *Myrmica rubra* 2277.
development, environmental effects, neuroendocrine system, *Apis mellifera* 3338.
development, juvenile hormones role, *Insecta* 6573.
developmental stages, polymorphism, colonial characteristics, *Macrotermes*
richiaelseni 435.
differentiation, methoprene, precocene, antagonism, *Prothomormes simplex* 6647.
digestive tract anatomy, comparison, *Rugitermes niger*, Brazil 8926.
intraspecific relationships, aggression, colonial characteristics, *Monomorium*
pharaonis 3838.
larvae, polymorphism, *Macrotermes richiaelseni* 1708.
lipid composition, *Neotermes bosei*, *Microtermes beesonii*, *Nasutitermes*
denudatus 7716.
males production, colonial characteristics, *Myrmica rubra* 2277.
morphology, *Aenictus decolor* 38.
morphology, biometry, *Nasutitermes aquilinus*, Brazil 8869.
morphology, colonial characteristics, *Paratrigona subnuda* 6996.
morphology, new species, *Lestrimelitta guyanensis*, *Trigona savannensis*, French
Guiana 3220.
morphology, overwintering colonies, *Vespa squamosa* 4644.
neurosecretory cells, cytology, *Postelectotermes nayari* 8914.
population structure, environmental effects, stress, *Formica obscuripes* 1304.
population structure, seasonal variations, *Retulitermes flavipes*, USA,
Mississippi 2137.
reproduction, colonial characteristics, *Cataglyphis cursor* 7002.
reproduction, colonial characteristics, *Coptotermes* 6217.
reproduction, colonial characteristics, *Lasius sakagami* 7000.
reproduction, ergatoids, colonial characteristics, *Nasutitermes corniger* 6998.
reproduction, parasites effects on, *Mastomys crassus*, *Nasutitermes corniger*,
Nasutitermes ephraei 4193.
reproduction, royal pair, colonial characteristics, *Macrotermes richiaelseni* 8591.
resource utilization, foraging behavior, *Bombus*, Sweden 4480.
social behavior, colonial characteristics, *Lasioglossum zephyrum* 6216.
social behavior, colonial characteristics, *Lasioglossum zephyrum* 7003.
social behavior, dominance, colonies, *Bombus terrestris* 5419.
social behavior, queens pheromones effects on, *Apis mellifera* 3044.
water intake, drinking behavior, *Macrotermes richiaelseni* 5918.
- Castianeira crocata**,
habitat preferences, phenology, USA, Florida 1963.
- Castianeira floridana**,
habitat preferences, phenology, USA, Florida 1963.
- Castration**,
hosts, parasites, *Cuterebra emasculator*, *Cuterebra fontinella* 6778.
- Casuarina eguiseifolia**,
pests, control programs, *Lymantria xylixa*, China, People's Rep. 4580.
- Casuarina glauca**,
pests, control programs, *Lymantria xylixa*, China, People's Rep. 4580.
- Catabolism**,
arginine, L-canavanine effects on, *Manduca sexta* 1763.
pheromones, antennae, enzymatic activity, olfaction, *Trichoplusia* n. 4168.
pheromones, molting effects on, *Trichoplusia* n. 227.
- Cataglyphis**,
stereotyped behavior, homing behavior 2751.
- Cataglyphis albicans**,
stereotyped behavior, homing behavior 2751
- Cataglyphis bicolor**,
stereotyped behavior, homing behavior 2751.
- Cataglyphis cursor**,
colonial characteristics, castes, reproduction 7002.
- Cataglyphis sabulosa**,
life cycle, flight activity, habitat 9114.
new species, taxonomy, morphology, Israel 8831.
- Catalase**,
activity, localization, integument, *Pieris brassicae* 8900
ontogeny, genetic control, *Zaprionus parvityger* 8653.
- Catanotopine**,
new species, taxonomy, China, People's Rep. 847.
- Cataulacus guineensis**,
nests, ecological distribution, shade effects on, Ghana 578.
- Catchability**,
attractants, chemoreception, *Glossina morsitans*, *Glossina pallidipes*, Zimbabwe
1173.
light traps, environmental factors, *Heliothis armiger*, *Heliothis punctiger*,
Australia, New South Wales 1472.
- Catches**,
pheromone traps, synthetic pheromones effects on, *Synanthedon* 1383.
pheromone traps, variations, *Scotogramma trifolii*, Canada, Manitoba 4337
- Catching methods**,
abundance estimation, *Glossina pallidipes*, Kenya 2479
attractants, volatiles, *Allium cepa*, *Hyalemya antiqua* 421
comparison, larvae, *Leptothrips mali* 4916.
electro-type light traps, efficiency, *Lepidoptera* 7254
emergence traps, aquatic environment, *Chironomidae* 6471.
larvae, nymphs, *Ixodes persulcatus* 7257.
machinery, rapid suction method, *Coleoptera* 7247.
nets, motor vehicles, *Hypera mele* 4088
pests, comparison, standardization, *Phyllocnistis citrella* 7251
pheromone traps, *Agrotis ipsilon* 2244.

Catching methods, (continued)

- pheromone traps, lures, trap height, *Popillia japonica* 8499
pheromone traps, modification, *Choristoneura fumiferana* 4593
pheromone traps, wood, *Trypandendron lineatum*, *Gnathotrichus retusus* 8753
samplers, emergence traps, larvae, *Insecta* 6467
samplers, traps, aquatic animals, crop fields, *Insecta* 5624
sampling, carbon dioxide, dry ice, *Amblyomma americanum* 3246
swarms, apiculture, synthetic pheromones, *Apis mellifera* 5292
trapping, *Glossina morsitans submorsitans*, *Glossina tachinodes*, *Nigeria* 5616
traps, attractants, color, site location, host-parasite interactions, *Sapya pumila*, *Megachile rotundata* 718
traps, efficacy, *Dermacentor andersoni* 5622
traps, pest control, *Tabanus lineola*, *Tabanus nigrovittatus*, USA, Massachusetts, Cape Cod 732
traps, pheromones, *Scolytidae* 64
traps, sex pheromone, bait, males, females, *Dioryctria disclusa*, USA, South Carolina 425
- Catecholamines**,
localization, neurosecretory cells, *Locusta migratoria* 8907
- Catharsius**,
malate dehydrogenase (oxaloacetate-decarboxylating), kinetics, muscles 5689
- Cathartus quadricollis**,
stored products pests, development, whey-soy drink mix 9323
- Cathepsin**,
isolation, characterization, midgut, *Cimex hemipterus*, *Cimex lectularius* 8950
- Catons**,
hemolymph, variation, diets, developmental stages, *Bombyx mori* 5673
- Catocala**,
species composition, keys, flight activity, USA, South Dakota 7917
taxonomy, coloration, status 7227
- Catocala blandula**,
polymorphism, morphology, larvae 8033
- Catocala neogama**,
association, population dynamics, *Catocala recta*, USA, New England 7613
- Catocala pretiosa**,
taxonomy, status, larvae morphology 7231
- Catocala recta**,
association, population dynamics, *Catocala neogama*, USA, New England 7613
- Catorhintha mendica**,
range extension, new records, host-parasite interactions, *Mirabilis nyctaginea*, USA, East Coast 4397
- Cattle**,
acaricides, efficacy, ivermectin injection, *Amblyomma americanum* 4506
bioaccumulation, methoprene, growth regulators, pests, chemical control, *Haematobia irritans* 4520
disease transmission, *Africa trypanosomiasis*, *Diptera* 1338
disease transmission, *Hippoboscids*, *Stomoxys calcitrans* 2169
ear tags, insecticides, chemical control, *Musca autumnalis*, *Haematobia irritans* 6131
grazing, environmental effects, population decline, *Tabanus similis*, *Chrysops aestuans*, USA, South Dakota 4474
hematophagy, *Chrysops*, *Hybomiosia*, *Tabanus*, Canada, Quebec 2802
hybridization, resistance, ectoparasites control, *Haemaphysalis longicornis* 649
parasites, *Boophilus annulatus*, *Boophilus microplus*, oviposition, molting, timing, seasonal variations 1916
parasites, chemical control, acaricides, *Boophilus microplus* 5278
parasites, disease transmission, *Hyalomma marginatum* rufipes, new species, *Babesia occultans* 6065
parasites, sampling methodology, *Hypoderma lineatum*, *Hypoderma bovis* 1681
parasites, surveys, *Arthropoda*, Bulgaria 4497
pest control, acaricides, coumaphos, Bay Vb 9328 Flowable, *Boophilus microplus*, *Boophilus annulatus* 4509
pest control, chemical control, *Simuliids* 1359
pest control, insecticides efficacy, *Hypoderma lineatum* 2172
pest control, larvae, ivermectin, *Musca autumnalis* 2173
pest control, repellents efficacy, *Simulium* 313
pest control, toxicants, *Musca autumnalis*, *Musca domestica* 2176
pests, abundance, *Diptera*, Germany, Fed. Rep., Bavaria 2184
pests, economic importance, reviews, *Haematobia irritans* urticae, USA 5279
pests, surveys, *Diptera*, British Isles, Scotland 736
susceptibility, ectoparasite transmission, *Phoropsis ovis*, *Ovis canadensis* 651
susceptibility, scabies infestation, *Phoropsis ovis* 2170
- Caulophilus oryzae**,
food sources, infestation, fruits 6137
- Caurinus detes**,
life history, morphology, eggs, larvae, pupae, USA, Oregon 7523
- Caveutauropus clavatus**,
new species, taxonomy, morphology, Seychelles 7245
- Caveutauropus propius**,
new species, taxonomy, morphology, Seychelles 7245
- Cavariella aegopodii**,
host plants, attractants, repellents 2056
- Cavariacolous species**,
geographical distribution, *Plusiocampa bonadoni* pavan, *Plusiocampa bonadoni* lanzai, *Plusiocampa bonadoni* bonadoni, Switzerland, Valais 4822
new genera, new species, *Oncinocampa falcipter*, Spain, Santander, Tresvías 4824
new species, *Trochobrythius strinati*, USA, Tennessee, Warren Co 4815
species composition, Geneva Museum, *Diptera*, Europe 5440
- Caves**,
escape behavior, geotaxis, *Trogilophilus cavicola* 5861
interspecific relationships, competition, effects on, body size
Pseudoniphalium mnetensis, *Pseudoniphalium pubescens* 1488
new records, geographical distribution, *Glacivicolica bathysciens*, USA, Wyoming 8702
surveys, community composition, zoogeography, Invertebrata, Barbados, Coles Cave 5419
water loss, cuticular permeability, *Lycosa howarthi*, USA, Hawaii 2607
- Cavia**,
resistance, host-parasite interactions, *Amblyomma americanum* 1232
- Cavia porcellus**,
laboratory animals, cages, entomofauna, *Diptera* 638
- Ceanothus crassifolius**,
host plants, association, phenology, *Mindae* 5953
- Cecheusa**,
compound eyes, ultrastructure 7294
- Cecidomyiidae**,
association, galls, *Rudbeckia laciniata*, *Asphondylia helianthiglobulus* 6020
new records, cleptoparasitism, *Araneae*, USA, Florida 1995
- Cecidophopsis ribis**,
infection, pathogens, *Verticillium lecanii*, British Isles 1811
- Cecropia**,
cells differentiation, electroporation, ovary 3512
host plants, symbiosis, nutrients, *Formicidae* 4398
- Cecropia lyratoloba nana**,
host plants, association, Aztec alfalfa 4403
- Cecropia monostachya**,
mutualism, *Formicidae*, Ecuador 5208
- Cecropia peltata**,
seeds, predation, forests, *Phedole*, Costa Rica 7604
- Cecropia B**,
antibacterial activity, immune system, *Antheraea pernyi* 8952
- Cecropin D**,
antibacterial activity, immune system, *Antheraea pernyi* 8952
- Cecropins**,
peptides, secondary structure, antibacterial activity, *Hyalophora cecropia* 7314
- Cecum**,
symbiosis, bacteria, *Lohita grandis* 4365
- Cedrus deodard**,
essential oils, response, *Coptotermes heimi* 2850
parasite resistance, effects on parasites feeding behavior, *Bifiditermes beesonii* 481
- Celastrina argiolus**,
association, interspecific relationships, *Formicidae* 7600
- Celerio euphorbiae**,
geographical distribution, Spain 7096
- Celerio euphorbiae**,
larvae, molting, role, hormones 2691
- Celithemis eponia**,
functional morphology, penis 3262
- Celithemis fasciata**,
temperature, effects on predation 6690
- Cell adhesion**,
induction, 20-hydroxyecdysone, juvenile hormones, cell lines, *Drosophila* 8060
- Cell aggregation**,
lectins, chemoreceptors, *Drosophila* 98
- Cell culture**,
Aedes albopictus, dengue virus, diagnosis, dengue, man 9224
Aedes albopictus, isolation, dengue virus 9225
cell lines, embryos, *Melanoplus sanguinipes* 4115
cell lines, methodology, *Aedes albopictus* 2514
cell lines, methodology, *Lepidoptera* 8059
cricket paralysis virus, proteins, purification, characterization, *Drosophila melanogaster* 8991
embryo cells, chromosomes, ultrastructure, *Boophilus microplus* 875
embryo cells, methodology, *Ceratitis capitata* 95
fat body cells, methodology, *Manesira brassicae* 876
Heteronychus arator, *Spodoptera frugiperda*, *Aedes albopictus*, *Oryctes baculovirus* replication 880
infection, baculovirus, *Heteronychus arator*, *Spodoptera frugiperda*, *Aedes albopictus* 2650
infection, entomopoxvirus, *Amsacta moorei*, *Euxoa auxiliaris* 3264
larvae, nuclear polyhedrosis virus, enzyme-linked immunosorbent assay, proteins, *Insecta* 1091
media (culture), TC-199-MK, *Insecta* 5618
methodology, *Spodoptera frugiperda* 878
nuclear polyhedrosis virus, DNA, restriction endonuclease mapping, Autographa californica 5757
nuclear polyhedrosis virus, maintenance, attenuation, *Hebotohis zea* 5743
nutrient requirements, vitamins, *Periplaneta americana* 877
ovary, infection, *Bombyx mori* 874
pathogens, *Drosophila C virus*, protein biosynthesis, *Drosophila melanogaster* 1032
cell cycle, epidermis, metamorphosis, *Tenebrio molitor* 1086
meiosis, *Boophilus microplus*, *Rhipicephalus sanguineus* 1517
oogenesis, corpora allata, juvenile hormones, *Diptera punctata* 2710
testes, development, Spermatogenesis, *Dermacentor variabilis* 2719
- Cell death**,
mating glands, sensitivity, juvenile hormones analogs, *Oncopeltus fasciatus* 8245
wing discs, γ -radiation effects on, *Drosophila melanogaster* 1106
- Cell division**,
blastoderm, embryogenesis, *Drosophila* 3461
cell cycle, meiosis, *Boophilus microplus*, *Rhipicephalus sanguineus* 1517
embryogenesis, Neomicropteryx hypogonae 4248
mesentery epithelium, regeneration, *Entomobryomorpha* 7436
spermatogenesis, kinetics, *Dermacentor variabilis* 2725
- Cell lines**,
B-N-acetylglucosaminidase secretion, enzymatic activity, *Culex quinquefasciatus*, *Drosophila melanogaster*, *Trichoplusia ni*, *Aedes pseudoscutellaris* 96
baculovirus persistent infection, *Spodoptera frugiperda* 1728
cell adhesion induction, 20-hydroxyecdysone, juvenile hormones, *Drosophila* 8060
cell culture, embryos, *Melanoplus sanguinipes* 4115
cell culture, methodology, *Aedes albopictus* 2514
cell culture, methodology, *Lepidoptera* 8059
chromatin isolation, proteins, *Trichoplusia ni* 7049
clones, immunology, *Drosophila melanogaster* 2513
continuous culture, *Heliothis virescens* 2512
cytology, 20-hydroxyecdysone effects on, *Drosophila* 5811
differentiation, juvenile hormones analogs effects on, *Drosophila* 7328
ecdysteroids effects on cell membranes, *Drosophila* 5656
ecdysterone stimulation, gene expression, heat shock proteins, cDNA, hybridization analysis, *Drosophila* 7835
embryo cells, actin acetylation, *Drosophila* 184
embryos, ecdysterone effects on cyclic AMP, cyclic GMP, *Drosophila melanogaster* 2571
gene expression, protein biosynthesis, ecdysteroids effects on, *Drosophila* 3336
growth, media (culture), TC-199-MK, *Insecta* 8852
heat shock proteins, gene expression, *Drosophila* 8634
Heliothis zea nuclear polyhedrosis virus, replication, biological control 3414
20-hydroxyecdysone effects on chemical composition, *Drosophila* 168

Cell lines, (continued)

- imaginal discs, wings, protein biosynthesis, *Trichoplusia ni* 8896.
 lectins, cell aggregation, *Drosophila* 98
 muscles, thorax, development, origin, *Drosophila* 5814
 nuclear polyhedrosis virus pathogenicity, *Oryza leucostigma* 1026.
 nutrient requirements, vitamins, *Periplaneta americana* 877
 Toxorhynchites ambonensis, virulence, dengue virus 7388
- Cell membranes,**
 3',5'-cyclic-AMP phosphodiesterase distribution, *Locusta migratoria* 181.
 cytoskeletal effects on, cell lines, *Drosophila* 5656
 flight muscle mitochondria, temperature effects on lipid composition,
Schistocerca gregaria 5709.
 heart muscles, ultrastructure, *Lithobius forficatus* 6541
 ions transport, enzymatic activity, portasome particles, *Manduca sexta* 3324
 muscles membranes, glutamic acid channels, *Locusta migratoria* 1731
- Cell surface,**
 bones, antigenic characteristics, comparative studies, *Blaberus craniifer* 100
 chemoreceptors, lectins, *Drosophila* 98
 membranes, adenosinephosphatase hydrolysis β -(2-furyl)-acryloyl phosphate,
 embryos, *Manduca sexta* 4949
 pathogens, mutants, virulence, *Pseudomonas aeruginosa*, *Gallina mellonella* 4198
- Cell-free system,**
Drosophila melanogaster, rRNA genes, cDNA transcription 8624
 globin precursors protein biosynthesis, *Charonimus thummi* 3075
 protein biosynthesis, mRNA, *Aedes albopictus*, *Sindbis virus* 3057
 transcription, tRNA Val genes cDNA, *Drosophila melanogaster* 9389
- Cells,**
 baculovirus isolation, *Heliothis zea* 3392
 bioluminescence, enzymatic activity, ultrastructure, *Photinus* 995
 blastoderm, embryogenesis, *Drosophila* 2670
 brain, heterochromatin, replication, larvae, *Drosophila nasuta* 4678
 brain, ultrastructure, neurosecretion, pupae, *Bombyx mori* 991
 central nervous system, ultra structure, *Periplaneta americana* 3266
 culture, bioassays, toxicity, δ -endotoxin, *Bacillus thuringiensis*.
Choristoneura fumiferana 879
 defective mutant, survival, ionizing radiation, ultraviolet radiation, *Drosophila melanogaster* 3902
 differentiation control, books, *Insecta* 8711
 differentiation, electropotential, ovary, *Cecropia*, *Rhodnius* 3512
 differentiation, gene regulation, loci, *Drosophila* 5445
 digestive tract, endocrine system, ultrastructure, *Lepidoptera* 924.
 digestive tract, morphometry, factors affecting ribosomes distribution, *Aedes aegypti* 923.
 endocrine function, midgut, exocytosis, secretions, granules, *Periplaneta americana* 8077
 endocrine system, midgut, ultrastructure, *Blattaria* 101.
 epidermis, differentiation, juvenile hormones effects on, *Lepidoptera* 3519
 eye, cytology, *Calliphora erythrocephala* 3288
 fat body, cell culture methodology, *Mamestra brassicae* 876
 growth, competition, wing discs, *Drosophila* 3468
 growth, larvae, eye disc, *Drosophila melanogaster* 3292.
 hemolymph, binding, foreign bodies, *Bombyx mori* 4148.
 hemolymph, *Formica rufa*, *Formica fusca* 6542.
 hemolymph, parasites effects on, *Plagiobrychus cylindraceus*, *Armadillidium vulgare* 1012.
 horizontal cells, sense organs, neurophysiology, anatomy, *Phaenicia sericata* 4138.
 interaction, leg regeneration, *Insecta* 4251.
 interaction, oogenesis, *Rhodnius prolixus* 393.
 Kc cells, proteins, translocation, distribution, heat shock, *Drosophila* 7838.
 KC-H cells, sRNA characterization, comparison, *Mammalia*, *Drosophila* 7861.
 midgut, epithelium, response, blood meals, digestion, *Culex tarsalis* 6547
 neuroendocrine system, ovary source, *Rhodnius prolixus* 964.
 neurosecretion, cytology, brain, *Amsacta collaris* 249.
 neurosecretion, ecdysone synthesis, assays, *Manduca sexta* 3343.
 neurosecretion, eye, *Hersilia savignyi* 435
 neurosecretion, ganglia, larvae, *Sarcophaga latocollis* 2526.
 neurosecretion, pars intercerebralis, *Bombyx mori* 3279.
 neurosecretion, spatial distribution, histology, brain, ventral nerve cord,
Poekilocentrus pictus 5066
 organelles, fat body, larvae, *Protophormia terrestris* 102.
 photoreceptors, fluorescence, *Musca domestica* 4133.
 prothoracic gland, ionic exchange, physicochemical properties, developmental stages, *Galleria mellonella* 6591.
 receptors, scolopidium, development, tympanum, larvae, *Locusta migratoria* 8218
 salivary gland, fluorescence, mutants, circadian rhythms, *Drosophila melanogaster* 4982.
 secretion, mandibular glands, ultrastructure, workers, *Apis mellifera* 4951.
 sister chromatid exchange, larvae, *Drosophila melanogaster* 5442.
 sternal gland epidermis, histology, *Mischocyttarus flavitarsis*, *Mischocyttarus drewseni*, *Mischocyttarus mexicanus* 5015.
 ultrastructure, cytochemistry, hemolymph, hemopoietic system, *Drosophila melanogaster* 6517.
 wing discs, morphology, development, larvae, *Drosophila* 7429.
- Cells brain,**
 Trichoptera, neurosecretions, biochemical analysis, 992.
- Cellulase,**
 activity, digestive tract, salivary gland, Protozoa, *Mastotermes darwiniensis* 5931.
- Cellulose,**
 digestion, digestive tract symbionts, *Cunninghamella echinulata*, *Odontotermes obscurus* 4364.
 digestion, enzymes, *Insecta* 4156.
 digestion, gut microflora, bacteria, *Orthoporus ornatus*, *Comanichus* 8308.
- Celyphoides cepianus,**
 genitalia, morphology, Czechoslovakia 1724.
- Celyphoides flavipalpus,**
 genitalia, morphology, Czechoslovakia 1724.
- Census,**
 new species, morphology, taxonomy, 5 species, China, People's Rep. 2443.
- Census changchias,**
 new species, morphology, taxonomy, China, People's Rep. 2443.
- Census duntus,**
 new species, morphology, taxonomy, China, People's Rep. 2443.
- Census zhangchius,**
 new species, morphology, taxonomy, China, People's Rep. 2443.

- Census zhitus,**
 new species, morphology, taxonomy, China, People's Rep. 2443.
- Census zhongtus,**
 new species, morphology, taxonomy, China, People's Rep. 2443.
- Cenocercia bifida hungerfordi,**
 salinity effects, cuticle permeability, osmoregulation 978.
- Census,**
 methodology, urban environments, *Blattella* 8858.
 population levels, mass rearing, *Drosophila melanogaster* 2487.
- Centaurea nigra,**
 flowering, pollinators competition, *Centaurea scabiosa* 6802.
 nectar production, pollinators competition, *Insecta* 6803.
 pollination, competition, *Insecta* 7552.
- Centaurea scabiosa,**
 flowering, pollinators competition, *Centaurea nigra* 6802.
 nectar production, pollinators competition, *Insecta* 6803.
 pollination, competition, *Insecta* 7552.
- Centers,**
 brain, food consumption inhibition, *Labidura riparia* 479.
- Central African Republic,**
 population levels, estimation, spatial distribution, host plants, *Aphis gossypii* 2899.
- Central America,**
 check lists, nomenclature, *Bruchidae* 7954.
 new species, geographical distribution, *Archilestes latialatus* 1666.
 new species, taxonomy, morphology, *Aradidae* 7978.
 28 new species, taxonomy, morphology, *Curatara* 7200.
 32 new species, taxonomy, morphology, *Gypsona* 7205.
 new species, taxonomy, morphology, *Pseudotopocerus*, *Strangalia* 6385.
 new species, 16 species, taxonomic revision, synonymy, *Lordithon* 6380.
 seed, predation, geographical variations, *Stator generalis*, *Enterolobium cyclocarpum* 5973.
- Central nervous system,**
 acetylcholinesterase, characterization, activity, inhibition, *Apis cerana indica* 2560.
 anatomy, physiology, *Periplaneta americana* 4963.
 axons growth, peripheral nerves, embryogenesis, *Acrididae* 333.
 biochemical analysis, identification, octopamine, methodology, *Mamestra configurata* 3282.
 biogenic amines, histochemistry, *Anthanomus grandis* 126.
 brain, ultrastructure, development, connective tissue, *Galleria mellonella* 125.
 cells, ultra structure, *Periplaneta americana* 3266.
 choline uptake, synaptosomes, *Locusta migratoria* 4964.
 development, embryos, immunocytochemistry, markers, *Drosophila* 8913.
 growth, peripheral nerves, embryogenesis, *Acrididae* 332.
 innervation, mechanoreceptors, leg, *Schistocerca gregaria* 8905.
 mammalia, insecta neurotransmitters effects on 200.
 nerves, tissue culture, *Drosophila* 3281.
 neurochemistry, biochemical analysis, neurotransmitters, *Insecta* 3284.
 organization, effects on flashing patterns, *Photinus versicolor* 265.
 sensors, growth, ectopic neurons, reviews, *Insecta* 3471.
 thorax ganglia, embryo cells, mutants, *Drosophila* 8648.
 ultrastructure, blood-brain barrier, *Scorpionida* 902.
- Centraetherum antelminticum,**
 plant extracts, insecticides, toxicity, *Bagrada cruciferana* 6625.
- Centrifugation,**
 isolation, enzymes, oxidases, microsomes, *Insecta* 5623.
- Centris,**
 pollination, flowering phenology, *Solanum palinacanthum* 4411.
 pollinators, foraging behavior, effects on reproduction, *Cochlospermum trifolium*, Panama 6787.
- Centromyces mahankoreus,**
 new species, taxonomy, morphology, West Indies, Saint Lucia 4823.
- Centromeres,**
 asynapsis, meiosis, effects on crossing-over, *Drosophila* 9402.
- Centrophlebotomy furcata,**
 taxonomy, life history, developmental stages, Israel 4002.
- Centropidium luteolum,**
 growth, productivity, life cycle 7012.
- Centruroides,**
 taxonomy, morphology 8744.
- Centruroides platnicki,**
 new species, taxonomy, morphology, Bahama Is. 8744.
- Centruroides sculpturatus,**
 hemagglutinins, specificity, erythrocytes, man 8438.
 neurotoxins, structure, X-ray crystallography 8174.
- Centruroides suffusus,**
 neurotoxins, effects on sodium channels, frogs nerves, rats brain synaptosomes 8175.
- Centruroides suffusus suffusus,**
 exotoxins, toxicity, effects on, skeletal muscles 5055.
- Cephala abietis,**
 parasites, population dynamics, horizontal distribution, soil, *Steinernema kraussei* 9173.
 taxonomic revision, nomenclature, Finland 7209.
- Cephala laticipha,**
 parasites infestation, biological control, *Nematoda* 2959.
- Cephaleta hayati,**
 new species, morphology, parasites, India 4872.
 new species, taxonomy, morphology, India 2462.
- Cephalobarus macrocephalus,**
 new records, geographical distribution, Bolivia 7157.
- Cephaloidae,**
 feeding behavior, association, flowers, *Liriodendron tulipifera*, USA, New York 5966.
- Cephenemyia,**
 parasites, larvae, nasal infection, *Odocoileus hemionus* 518.
- Cephenemyia apicata,**
 parasites, larvae, nasal infection, *Odocoileus hemionus* 518.
- Cephenemyia jellisoni,**
 parasites, larvae, nasal infection, *Odocoileus hemionus* 518.
- Cephidae,**
 taxonomy, morphology, USSR 4102
- Cephonodes,**
 compound eyes, ultrastructure 7294

- Cephus cinctus**, population dynamics, pests, crop fields, Triticum 8464.
- Ceracra nigrosericea**, developmental stages, morphology, life cycle, feeding behavior, Norway 5429.
- Ceracra delforata**, brain, morphology 7289.
- Ceraleurodus duckei**, new species, taxonomy, morphology, Brazil 4015.
- Cerambycidae**, coexistence, 19 species, habitat, girdles, *Oncideres pustulata* 5981.
- Cerambyx**, host plants, geographical distribution, ecological distribution, USA, Texas 1944.
- Cerambyx**, hosts, pathogenicity, *Beauveria tenella* 2636.
- Cerambyx**, infestation, mortality, Coniferales, USA, Colorado 7551.
- Cerambyx**, larvae, parasitism, *Ycaploca evansi*, South Africa 5178.
- Cerambyx**, new records, geographical distribution, host plants, USA, Missouri 8698.
- Cerambyx**, surveys, Nepal 1609.
- Ceramius capicola**, reproductive behavior, life history, South Africa 470.
- Ceramius lichtensteini**, reproductive behavior, life history, South Africa 470.
- Ceramius linearis**, reproductive behavior, life history, South Africa 470.
- Ceratitis**, morphology, keys 5649.
- Ceratitis capitata**, activity, α -glycerophosphate dehydrogenase activity, agitation effects on 8109.
- Ceratitis**, aminopeptidase, peptidase, characterization, tissues distribution 933.
- Ceratitis**, brain adenylate cyclase regulation, plasma membranes 8091.
- Ceratitis**, cell culture, embryo cells, methodology 95.
- Ceratitis**, chemical control, malathion, USA, California 713.
- Ceratitis**, control programs, fumigation, methodology 1422.
- Ceratitis**, dispersal, sterilized organisms, rearing 6136.
- Ceratitis**, fatty-acid synthetase complex, biochemical analysis 940.
- Ceratitis**, flight muscle, multienzyme complexes, fructose-bisphosphate aldolase + triosephosphate isomerase, purification, characterization 2574.
- Ceratitis**, mass rearing methodology, measuring techniques 7252.
- Ceratitis**, metamorphosis, seeds extracts effects on, *Azadirachta indica* 9153.
- Ceratitis**, mutants, eye fluorescence, genetic analysis 1532.
- Ceratitis**, pest outbreaks, fruit trees, USA, California 3014.
- Ceratitis**, pests, infestation, control, USA, California 1442.
- Ceratitis**, precocene II, topical application, effects on attractancy, pest control 8099.
- Ceratitis**, rearing methodology, automation, larvae 8020.
- Ceratitis**, reovirus, detection, characterization 1025.
- Ceratitis**, sex determination methodology, automation, recombination, genetic factors 8009.
- Ceratitis**, surveys, parasitoids, Costa Rica 2818.
- Ceratitis malgasa**, morphology, keys 5649.
- Ceratitis capitata**, pest outbreaks, pest control, environment management, USA, Florida 3745.
- Ceratocapsus nigropiceus**, new records, geographical distribution, USA, Florida 5534.
- Ceratomyxa ulmi**, Dutch elm disease, biological control, *Pseudomonas syringae* 4526.
- Ceratophyes proboscis**, new species, new genera, taxonomy, morphology, Brazil 8739.
- Ceratophyllum**, aquatic weeds, biological control, host specificity, *Paraponyx rugosalis*, USA 2204.
- Ceratophyllum**, association, nests, *Iridoprocne bicolor*, *Tachycineta thalassina* 6873.
- Ceratophyllum celus celus**, association, nests, *Iridoprocne bicolor*, *Tachycineta thalassina* 6873.
- Ceratophyllum farreni**, population density variation, nests, *Delichon urbica urbica* 6030.
- Ceratophyllum fasciatum**, pest control, silica dust, environmental effects 9255.
- Ceratophyllum gallinae**, association, nests, *Iridoprocne bicolor*, *Tachycineta thalassina* 6873.
- Ceratophyllum**, infestation, habitat, *Mustela erminea*, New Zealand 8332.
- Ceratophyllum hirsutum**, population density variation, nests, *Delichon urbica urbica* 6030.
- Ceratophyllum idius**, association, nests, *Iridoprocne bicolor*, *Tachycineta thalassina* 6873.
- Ceratophyllum rusticus**, population density variation, nests, *Delichon urbica urbica* 6030.
- Ceratophyllum fasciatum**, parasites, infection, medical importance, *Rattus rattus*, Nigeria 2933.
- Ceratopidae**, keys, morphology 6341.
- Ceratopogonidae**, biology 815.
- Ceratopogonidae**, disease transmission vectors, aging methods 4493.
- Ceratopogonidae**, surveys, taxonomy, China, People's Rep 1575.
- Ceratopogonidae**, temperature effects, emergence, USA, Mississippi 750.
- Ceratomolen**, pollination, host plants, reproductive strategy, *Ficus* 6781.
- Ceratovacuna silvestrii**, chromosome number 2321.
- Cerci**, neurons, acoustic responses, stridulation frequency, song, *Gryllus campestris* 4972.
- Cerci**, neurons, anatomy, *Periplaneta americana* 5664.
- Cercoriza**, new genera, taxonomy, morphology, Papua New Guinea, Solomon Is. 4885.
- Cercyon**, predators, developmental stages, mortality, *Musca vetustissima*, Australia 2880.
- Cereals**, plant extracts, Avena, olfactory stimuli, attractancy, aggregation, *Oryzaephilus surinamensis* 6700.
- Ceriatrigon coromandelianum**, hosts, parasites life history, morphology, *Tetractinopora victoris* 2630.
- Ceriatrigon olivaceum**, hosts, new species parasites, *Ramicephalus olivaceus* 2628.
- Ceriatrigon**, pathogens, *Ramicephalus olivaceus*, India 282.
- Ceriodaphnia**, population regulation, predators, ponds, *Chaoborus* 8616.
- Ceroetina spicata**, taxonomy, morphology, setae, larvae, pupae 1678.
- Cerocephala dubarae**, synonymy, *Cerocephala rufa* 2459.
- Cerocephala eccepotagatri**, taxonomy, morphology, keys 2459.
- Cerocephala rufa**, taxonomy, morphology, keys, geographical distribution, hosts, synonymy 2459.
- Cerococcus**, hosts, parasites, new species, *Cephaleta hayati*, India 4872.
- Cerococcus**, parasites, new species, *Cephaleta hayati*, India 2462.
- Ceropalinae**, taxonomic revision, *Minotocyphus*, *Pomplinae* 8826.
- Ceroplastes cirripediformis**, biological control, pest control, parasites, USA, Texas 6116.
- Ceroplastes floridensis**, growth regulators RO 13-5223, effects on, development 6642.
- Ceroplastes**, pests, population dynamics, Egypt 6949.
- Ceratomyxa facialis**, feeding, effects on crops, *Phaseolus vulgaris* 4609.
- Ceratomyxa facialis**, feeding, crops damage 9347.
- Ceratomyxa ruficornis rogersi**, disease transmission, vectors, bean curly dwarf mosaic virus, bean mild mosaic virus, Costa Rica 7658.
- Ceratomyxa trifurcata**, damage, *Alemania tenuissima* infection, Glycine max 9277.
- Ceratomyxa**, pests, crops damage, effects on seeds quality, Glycine max 8511.
- Ceratomyxa**, viruses, characterization, isolation, blood 1824.
- Certonotus**, new records, new species, South America 1646.
- Certonotus invictus**, new species, geographical distribution, South America 1646.
- Certonotus umbrarum**, new species, geographical distribution, South America 1646.
- Cervaphis quercus**, chromosome number 2321.
- Cervicornia**, new genus, taxonomy, Nepal 7979.
- Cervicornia brevisstris**, new species, taxonomy, morphology, Nepal 7979.
- Cervus elaphus**, hosts, parasites transmission, Diptera 662.
- Cerylonidae**, new species, taxonomy, morphology, 8 species, Mascarenes 4813.
- Cesotoma trifurcata**, pest control, insecticides, pathogens 2236.
- Cetonia aurata**, head, mouthparts, functional morphology, feeding 6510.
- Cetonia**, sensilla, wings, histology, functional morphology, flight 7302.
- Cetoniidae**, taxonomic revision, nomenclature 8751.
- Cetraria delisei**, abundance effects on population growth, *Hypogastura fulbergi*, Norway 5267.
- Ceutorhynchus litara**, biological control, weeds, *Cirsium arvense*, Canada, Ontario 2952.
- Ceutorhynchus pallidicornis**, morphology 4683.
- Ceutorhynchus trimaculatus**, biological control, weeds, environmental impact, *Cynara scolymus* 531.
- Ceutorhynchus**, predators, life history, weed control, *Carduus* 1979.
- Ceutorhynchoides horridus**, weed control, environment management, *Carduus nutans*, USA, North Dakota 2208.
- Ceylon**, new species, taxonomy, morphology, *Isometrus besucheti*, *Isometrus acanthurus* 4770.
- Chaenusa**, parasites, natural enemies, pests, *Hydrellia philippina*, India 7673.
- Chaetocnema concinna**, pests, sugar beet, Japan 1241.
- Chaetocnema discreta**, pests, sugar beet, Japan 1241.
- Chaetocnema**, taxonomy, morphology 7937.
- Chaetophiloscia baissi**, taxonomic revision, *Afrophiloscia* 7246.
- Chaetophiloscia atlantica**, new species, Bahama Is 806.
- Chaetophiloscia cubensis**, new species, Cuba 806.
- Chaetophiloscia mandibularis**, new species, Tobago 806.
- Chaetophylla tuberculata**, parasites, range extension, USA, Alaska 4743.
- Chaetophylla fragaefolia**, transmission, strawberry mild yellow edge virus, strawberry crinkle virus 274.
- Chaetotrechiana procerus**, new species, new genera, taxonomy, morphology, Japan, Shikoku I 4818.
- Chagas' disease**, disease reservoirs, Parasites, *Rhodnius palliensens*, Mammalia, Panama 667.
- Chagas' disease**, vectors, surveys, methodology, *Triatoma infestans* 8437.
- Chagas disease**, vectors, juvenile hormones, analogs, structure-activity relationships, *Panstrongylus megistus* 5000.
- Chaithophorus**, keys, morphology 8815.
- Chaithophorus diversitarsis**, new species, taxonomy, morphology, Poland 8815.
- Chalcididae**, infestation, species composition, parasites, *Sphaerolecanium prunasti* 9138.
- Chalcididae**, morphology, taxonomy, keys, Africa 1649.
- Chalcididae**, new records, geographical distribution, Poland 9467.
- Chalcididae**, new species, morphology, host plants, Mascarene Is., Reunion I. 4877.
- Chalcididae**, sampling, preservation, methodology 4096.

- Chalcodermus aeneus**,
host plants pest resistance, cultivars, *Vigna unguiculata* 8522.
pest control, insecticides, yield, *Vigna unguiculata* 8540
pests, cultivars, resistance, *Vigna unguiculata* 4614
predator-prey interactions, *Solenopsis invicta* 591.
- Chalcocirtus martensi**,
new records, India 801.
- Chalepoxenus muellerianus**,
colonial characteristics, social behavior, interspecific relationships, raiding
behavior 6984.
- Chalcodoma muraria**,
colonies, mortality, Poland 9363.
- Chalkbrood disease**,
apiculture, disease control, *Apis mellifera* 2234
colonies, mortality, *Apis mellifera* 1803
occurrence, *Apis mellifera*, Japan 1816.
- Chalcovia tibialis**,
parasites, *Polistes exclamans*, mortality, population dynamics 2155.
- Chambers**,
culture systems, *Insecta* 3249
food preferences, feeding behavior, *Spodoptera frugiperda*, *Euleus indica* 3566.
- Channels**,
glutamic acid, muscles membranes, cell membranes, *Locusta migratoria* 1731.
- Chaoborus**,
ecosystem dynamics, abundance, environmental conditions, hydrology, Tasmania,
Fidler L. 6225
larvae, vertical migrations, phototaxis 3619
phenology, pupation, life cycle, bogs, USA, Michigan 7015
predator-prey interactions, feeding, zooplankton, mathematical models 4655.
predators, population regulation, ponds, *Cladocera* 8616.
- Chaoborus americanus**,
developmental stages, polymorphism frequency, temperature effects 568
life cycle, phenology, bogs, USA, Michigan 7015
predation, effects on, zooplankton, species composition, USA, Michigan 583
predators, effects on polymorphism, *Daphnia pulex* 572.
- Chaoborus brasiliensis**,
benthos, Venezuela, Valencia L. 621.
- Chaoborus crystallinus**,
metabolism, anaerobiosis, larvae 3368.
- Chaoborus flavicans**,
life cycle, phenology, bogs, USA, Michigan 7015.
- Chaoborus punctipennis**,
life cycle, phenology, bogs, USA, Michigan 7015.
predator-prey interactions, capture, efficiency, light effects, dark, *Copepoda*
489.
- Chaoborus trivittatus**,
larvae, feeding behavior, predation, zooplankton, *Daphnia pulex* 2001
life cycle, phenology, bogs, USA, Michigan 7015.
- Chapparal**,
community composition, environmental impact, power lines, *Arthropoda*, USA,
Arizona 9183.
- Chapparral**,
fires, recovery, succession, community composition, *Insecta*, USA, California
5246.
- Characteristics**,
probability, classification methodology, systematics, *Insecta* 3169.
- Characterization**,
isoenzymes, analysis methodology, *Culicidae* 8012.
metabolites, larvae, *Cylas formicarius* 951.
- Charadra ingenua**,
geographical distribution, geographical variations, morphology, coloration 2510.
- Charops**,
parasites, *Sylepta derogata*, Nigeria, Ibadan 5938.
- Charops aditya**,
morphology, larvae 7261.
- Charops bersel**,
morphology, larvae 7261.
- Charoxus bicolor**,
new species, taxonomy, morphology 6365.
- Charoxus blackwelderi**,
new species, taxonomy, morphology 6365.
- Charoxus hermani**,
new species, taxonomy, morphology 6365.
- Charoxus major**,
new species, taxonomy, morphology 6365.
- Charoxys**,
taxonomy, morphology 6365.
- Chauliognathus**,
defence secretions, antifeedants, *Phidippus* 2612.
- Chauliognathus lecontei**,
defence secretions, antifeedants, *Phidippus* 2612.
- Chauliognathus pennsylvanicus**,
defence secretions, antifeedants, *Phidippus* 2612.
mate selection, competition effects on, interspecific relationships, *Vespidae*
1142.
populations, sexual behavior, mathematical models 1148.
- Chauliops horizontalis**,
new species, taxonomy, morphology, China, People's Rep. 4009.
- Chauvinities**,
new taxa, new subtribe 4029.
- Chazara rangontavica**,
new species, taxonomy, morphology, USSR, Tadzhikistan 7234.
- Check lists**,
abundance, habitat, *Lepidoptera*, USA, Texas, Barton Creek Canyon 7915.
adults, *Trichoptera*, USA, Pennsylvania, Pinesville Creek 7027.
Arctiidae, Canada, British Columbia 5324.
bibliographies, taxonomy, families, *Ephemeroptera* 7975.
Chrysomelidae, USA, Missouri 4740.
Culicoides, Sri Lanka 2413.
Curculionidae, Spain, Teruel, Morade Rubielos 5518.
entomofauna, ecology, geographical distribution, British Isles 3137
geographical distribution, *Ancylolomia*, China, People's Rep. 841.
geographical distribution, *Bledionotinae* 825.
geographical distribution, *Formicidae*, Korea 3146.
geographical distribution, habitat, *Limnephilidae*, USA 8695.
geographical distribution, *Lepidoptera*, Italy, Tuscany 3141.
- Check lists, (continued)**
geographical distribution, new records, *Hydropsychidae*, USA 8693
geographical distribution, *Odonata*, Mozambique 7107.
geographical distribution, *Sarcophagidae*, Korea 3147.
hosts, *Eurytoma*, North America 8825.
larvae, streams, freshwater ecosystems, *Trichoptera*, Netherlands 1574.
Lepidoptera, Nigeria 7108.
Leptotrombidium, China, People's Rep. 3148.
morphology (organisms), taxonomy, *Plecoptera*, Nepal 3231.
new records, geographical distribution, habitat, *Rhyacophiloidea*, USA 8694.
new records, geographical distribution, *Microlepidoptera*, Sweden 4722.
nomenclature, *Bruchidae* 7954.
parasites, *Arthropoda*, *Mammalia*, New Zealand 1231.
parasites, *Siphonaptera*, *Mammalia*, USA, Alaska 5530.
pests, *Manihot esculenta*, *Insecta*, India 4620.
Plecoptera, USA, Alaska 7019.
predators, *Hypera posica*, USA 3736.
rare species, new records, geographical distribution, *Microlepidoptera*, Sweden
4723.
species composition, *Auchenorrhyncha*, Belgium 9482.
species composition, *Carabidae*, *Cicindelidae*, Hungary, Bekes 8683.
species composition, *Cicindelidae*, *Carabidae*, Europe 9463.
species composition, *Coleoptera*, France, Pyrenees Mts., Spain, Pyrenees Mts.
7075.
species composition, *Drosophilidae*, Australia 8705.
species composition, *Ecitoninae*, Mexico 6325.
species composition, *Hymenoptera*, British Isles, Isle of Man 6308.
species composition, *Lepidoptera*, check lists, species composition 8677.
species composition, *Lepidoptera*, Spain 7081.
species composition, reviews, *Ecitoninae*, Mexico 9500.
species composition, *Macrolepidoptera*, Hungary, S. Transdanubia 8681.
species composition, *Noctuidae*, German Dem. Rep. 7072.
species composition, *Odonata*, France, Serignan 7074.
species composition, *Opinae*, *Microgasterinae*, Hungary 8687.
species composition, *Platygastridae*, Finland 7894.
species composition, reviews, *Ecitoninae*, Mexico 9500.
species composition, *Staphylinidae*, Switzerland 7099.
species composition, *Symphyta*, Europe, Carpathian Basin 8682.
species composition, *Symphyta*, Switzerland 8680.
species composition, *Tipulidae*, Iberia peninsula 9469.
species composition, 30 species, *Odonata*, India, Uttar Pradesh, Pithoragarh
District 8689.
species, *Conuptyx* 2468.
species diversity, *Ichneumoninae*, Belgium 6324.
species, taxonomic revision, *Hilaira* 7153.
surveys, *Mecoptera*, USA, Kentucky 3152.
surveys, *Membracidae*, USA, Kentucky 3154.
surveys, *Rhapalocera*, USA, California, Santa Cruz I. 7118.
Trichoptera, USA, Virginia 3935.
vectors, disease transmission, cadang-cadang, *Insecta*, Philippines 3804.
vectors, vascular bacteriosis, *Xanthomonas manihoti*, *Manihot esculenta*, *Insecta*
4528.
- Cheilonemes lunata**,
geographical distribution, new records, Sweden 3943.
- Cheilonemes paralia**,
hyperparasitism, host preferences, development, rearing, *Microterys flavus* 5185.
- Cheiridium**,
new species, taxonomy, morphology, Kenya 4768.
- Chelicerata**,
embryology, development 3459.
- Cheimidae vittiger**,
temperature effects on nymphs development, reproduction 6644.
- Cheilobasis perplexa**,
host plants chemical composition effects on growth 615.
- Chelonus curvicaulatus**,
host-searching behavior, kairomones 5944.
- Chelonus insularis**,
parasitoids, effects on hosts larvae development 4379.
parasitoids, host selection, eggs, *Heliothis virescens* 2815.
- Chelonus obturbatus**,
new species, morphology, Tunisia 2449.
- Chelostoma campanularum**,
range extension, new records, USA, New York 2365.
- Chelostoma fuliginosum**,
range extension, new records, USA, New York 2365.
- Chemical analysis**,
attractants, proteins, *Dacus tryoni* 3757.
odors, oviposition, chemical stimuli, *Lucilia cuprina* 1917.
venom, mass spectroscopy, *Paravespula vulgaris* 248.
volatiles, pheromones, *Apis mellifera* 8116.
- Chemical communication**,
alarm pheromone, trail pheromone, role, sternal gland, *Aneuretus simoni* 2758.
food sources, foraging behavior, colonial characteristics, *Formica polyctena*
3841.
mating behavior disruption, pest control, pheromone traps, *Ameylois transistella*
8507.
pheromones, chemoreception, *Hyalomma dromedarii* 6686.
pheromones, food sources, recruitment, *Tetranorium inpurum* 3840.
pheromones, insect 4310.
pheromones, pest control, *Insecta* 3710.
pheromones, social behavior, *Periplaneta americana* 5119.
scent marking behavior, flowers, foraging behavior, *Bombus vosnesenskii* 1925.
sex pheromone, (Z)-9-alkenols effects on inhibition, *Spodoptera litura* 1163.
sex pheromone, attractancy, *Zygena* 5116.
sex pheromone, disruption, pest control, *Anthonomus grandis* 5293.
sex pheromone, mating behavior, *Tiphidae* 6665.
sex pheromone, pests, *Lygoecis communis* 8098.
sternal gland secretions, *Aneuretus simoni* 2762.
trail pheromone, chemical composition, reviews, *Trigona spinipes* 5009.
trail pheromone, sternal gland, morphology, *Onychomyrmex* 8977.
trophallaxis, castes, colonial characteristics, *Apis mellifera mellifera* 6992.
- Chemical composition**,
abdomen cuticles, resilin, abdomen 110.
aggregation pheromone, attractancy, *Tribolium castaneum*, *Tribolium confusum* 2591.
aggregation pheromone, *Rhyzopertha dominica* 1779.
alarm pheromone, (Z)-2-alkenyl formate, alarm behavior, *Tyrophagus putrescentiae*

Subject Index

Chemical composition, (continued)

7342.
antibacterial agents, proteins, *Hyalophora ecrepia* 203.
antifeedants, plants, *Leptinotarsa decemlineata* 521.
attractants, females, *Lucilia cuprina* 215.
attractants, sex pheromone, males, *Euxoa auxilaris* 698.
cell lines, actin, 20-hydroxyecdysone effects on, *Drosophila* 168.
cholesterol, diets, effects on growth, development, *Bombix mori* 2690.
cultivars, pests effects on *Empoasca fabae*, *Medicago sativa* 731.
cuticle lipids, *Arthropoda* 883.
cuticles, organic compounds, alkanes, alkenes, *Hymenoptera*, USA, Colorado 107.
cuticles, organic compounds, lipids, *Diaperhoma femorata* 109.
cuticles, organic compounds, sex differences, *Musca domestica* 108.
defense secretions, larvae, *Papilio* 2611.
defense secretions, taxonomy, *Bulbitermes singaporensis* 2609.
defense secretions, *Artystina*, New Zealand 1802.
defense secretions, *Carissia wahlbergi* 5018.
defense secretions, comparative studies, phylogeny, *Nasutitermitinae* 1566.
defense secretions, *Curvitermes strinatius* 1797.
defense secretions, Dufour's gland, volatiles, *Rhytidoponera metallica*, Australia 246.
defense secretions, *Nasutitermitinae*, Papua New Guinea 255.
defense secretions, *Retulitermes flavipes*, *Retulitermes virginicus* 1795.
defense secretions, *Syngasteria spumosa* 986.
defense secretions, *Syntermes* 1799.
defense secretions, taxonomy, *Staphylinidae*, New Zealand 247.
diflubenzuron effects on, *Aedes aegypti* 302.
fatty acids, genital tract, *Acheta domesticus*, *Gryllus* 198.
hemolymph hormones, *Sarcophaga bullata* 204.
hemolymph, larvae, pupae, *Manduca sexta* 2576.
hemolymph, temperature effects, water stress, *Spodoptera exigua* 4173.
host plants, effects on growth, *Hispinae* 615.
host plants, effects on larvae mortality, *Dacus oleae* 7607.
host plants, effects on larvae survival, *Pteris rapae*, *Paropsis atomaria* 7567.
host plants, effects on population dynamics, larvae, *Aedes triseriatus* 6818.
host plants, effects on survival, fecundity, *Brevicoryne brassicae* 7599.
host plants, furanocoumarins, xanthotoxin, growth, *Papilio polytes* 5968.
host plants, pests effects on, *Acyrtosiphon*, *Medicago sativa* 540.
host plants, predators effects on, *Agromyza frontella*, *Medicago sativa* 552.
host plants, tannins, herbivores, reviews, *Insecta* 6010.
hymen, cuticle, *Melanophus* 1729.
mandibular gland secretions, age effects on, *Trigona gibboidi* 8117.
mimicry, repellents, *Meliorrhynchus rhipidius* 1753.
pests effects on host plants, *Medicago sativa*, *Agromyza frontella* 9296.
pests, stored products, effects on food quality, *Acarus siro* 2202.
pheromones, *Apis mellifera* 212.
pheromones, conferences, *Insecta* 9503.
pigments, *Manduca sexta* 1790.
salivary gland secretion, *Glossina morsitans* 983.
secretion, post-pharyngeal gland, organic compounds, lipids, queens, *Solenopsis invicta* 987.
secretions mandibular glands, *Apis mellifera* 242.
secretions, rectal gland, *Dacus cucurbitae* 8114.
sex pheromone, *Cochliomyia hominivorax* 221.
sex pheromone, (E)-10-hexadecenal, attractancy, males, *Dichocrocyx punctiferalis* 7341.
sex pheromone, (Z)-11-hexadecenal, (Z)-9-tetradecenal, *Heliothis virescens* 6578.
sex pheromone, attractancy, components, *Spodoptera littoralis* 6575.
sex pheromone, attractancy, *Quadraspidioides permiosus* 1783.
sex pheromone, attractants, females, *Pseudodelia unipuncta* 219.
sex pheromone, biochemical analysis, females, *Cydia pomonella* 2600.
sex pheromone, *Cryptophlebia leucotreta* 2599.
sex pheromone, effects on persistence, *Insecta* 216.
sex pheromone, *Estigmene acrea* 1782.
sex pheromone, *Heliothis subflexa* 2585.
sex pheromone, *Leucania loreyi* 1773.
sex pheromone, *Manestra* post 228.
sex pheromone, *Manestra suasa* 6577.
sex pheromone, *Ostrinia furnacalis* 1778.
sex pheromone, *Ostrinia furnacalis* 1781.
sex pheromone, *Panolis flammea* 8973.
sex pheromone, pest control, *Rhyacionia frustrana* 214.
sex pheromone, *Platyphila carduactylus* 1788.
sex pheromone, *Plusia chalcites* 2598.
sex pheromone, variability, population studies, *Argyrotaenia velutinana* 1772.
sex pheromone volatiles, *Dacus oleae* 8096.
spermatophores, proteins, *Glossina morsitans* 354.
tail pheromone, chemical communication, reviews, *Trigona spinipes* 5009.
volatiles, Dufour's gland, *Andrena*, North America 245.
webs, fibers, protein biosynthesis, *Nephila clavipes* 148.
webs, silk, *Aranea* 196.
yolk, oogenesis, histochemistry, proteins, *Sarcophaga ruficornis* 1083.

Chemical content

- defense secretions, Dufour's Gland, comparison, *Atta sexdens* 254.
defense secretions, *Megacephala virginica* 259.
Zea may, stored products pests effects on, *Prostephanus truncatus*, *Sitophilus zeamais*, *Sitotroga cerealella* 3767.

Chemical control

- acetoph, food chains acute toxicity, *Phytoseiulus persimilis*, *Tetranychus urticae* 309.
aerosols, insecticides, permethrin, pyrethrin, resmethrin, malathion, Anopheles
gambiae, *Culex quinquefasciatus* 6093.
allitin, *Pectinophora gossypiella*, *Earias*, *Heliothis armigera* India 7701.
Amsacta moeta, insecticides, monoterpenes, toxicity, mortality 1844.
Aomidiella auranti, orchards, effects on community structure, *Formicidae* 2879.
apiculture pests, *Varroa jacobsoni* 4586.
baai, toxicity, *Acromyrmex octospinosus* 2981.
barriers, agricultural practices, *Aphididae*, *Solanum tuberosum* 684.
biological control, integrated control, *Aithya*, *Heliothis virescens* 4570.
blueberry shoestring virus vectors, insecticides, *Illinoia*, *pepper* 8458.
bluegreen virus vectors, ozone, fumigation, biological safety cabinets.
Culicoides varipennis 8477.
carbaryl treatment, man, *Pediculus humanus capitis* 3665.
carbofuran, diazinon, quinalphos, efficacy, *Orseolia oryzae*, *Scirpophaga*
inertialis 7771.
chemosterilization, topical application, *Scolytus multistriatus* 8234.

Chemical control, (continued)

- cocoon pests, insecticides, *Nephantis serripa* 1396.
control programs, larvae, *Calcididae*, *Czechoslovakia* 2930.
crop protection, economics, integrated control, *Oryza sativa*, Philippines 5391.
crop protection, grasses, insecticides, *Heliothis armigera* 728.
culture collections parasites, sulphonomides, *Malameba locustae*, *Acrididae* 1002.
DDT, vectors, disease control, filariasis, *Anopheles farauti*, *Guadalcanal* 1357.
dimethrin, toxicity, *Glossina morsitans* 314.
disease transmission, umidocarp dipropionate, *Babesia bigemina*, *Boophilus decoloratus* 6064.
ectoparasites, insecticides, poultry, *Ornithonyssus sylvarum* 1387.
effects on association, *Formicidae*, *Diatraea saccharalis* 609.
effects on disease transmission, *malaria*, *Anopheles stephensi* 663.
effects on mortality, apiculture, USA, New York 7752.
effects on nontarget organisms, population levels, *Carabidae*, *Staphylinidae*,
Czechoslovakia, Jenke Hory Mis 7571.
efficacy, comparative studies, *Phorophora columbica* 744.
entomology, farm management, pest control 686.
evaluation, behavior, effects on pest control, *Coptotermes formosanus* 4606.
(E)- β -farnesene, carboxylic acids, effects on host searching behavior,
landing behavior, *Myzus persicae* 7343.
flight activity, insecticides timing, pheromone traps, *Synanthedon rhododendri*
700.
fumigants, mortality, *Anastrepha suspensa* 3444.
fumigants, stored products pests, *Acan* 1045.
fumigation, carbon dioxide, *Anastrepha suspensa* 1845.
gammalin, *Phosphorus virescens*, *Nigeria* 3002.
growth regulators, development disruption, *bs* (thiocarbamate) R-31026, juvenoid
R-20458, *Triolium confusum*, *Tribolium castaneum* 6130.
growth regulators, UC-62644, efficacy, *Choristoneura fumiferana* 6959.
Helicoverpa armigera, pesticide residues, carbaryl, *Cicer arietinum* 7773.
herbicides, dinoseb-acetate, effects on, developmental stages, *Culex pipiens* 682.
herbicides, malathion, larvae, *Culex pipiens* 1038.
insecticides activity *Isana felina*.
insecticides, *Aedes aegypti* 2919.
insecticides, *Anacardium gemmatum*, *Cesotoma trifurcata* 2236.
insecticides, Bay Vi 7533, systems, livestock, *Musca autumnalis*, *Musca domestica* 9326.
insecticides, carbaryl, fenitrothion, fenitrothion, monoterpenes, efficacy,
Holotrichia consanguinea 7792.
insecticides, carbaryl, persistence, soil, *Diabrotica longicornis* 8521.
insecticides, chlorfenvinphos, chlorpyrifos, *Delia brassicae* 2210.
insecticides, chlorfenvinphos, *Delia brassicae* 2262.
insecticides, crop fields, *Carabidae* 1394.
insecticides, cypermethrin, *Heliothis armigera*, *Diparopsis castanea*, *Earias* 5389.
insecticides, decamethrin, *Aedes fluviatilis*, *Culex pipiens fatigans* 5350.
insecticides degradation, ashes effects on, *Laspeyresia pomonella*, USA,
Washington 3785.
insecticides, dicofenophos, benomyl, trees, trunk injection, *Carya ilicifolia*,
Monellipossis nigropunctata, *Monella carvella*, *Tinocallis caryaeformis* 8566.
insecticides, diflubenzuron, efficacy, *Anthonomus grandis grandis* 4584.
insecticides, diflubenzuron, *Muscidula* 5345.
insecticides, ear tags, cattle, *Musca autumnalis*, *Haemaphysa urticae* 6131.
insecticides, ear tags, cattle, *Musca autumnalis*, *Haemaphysa urticae* 9257.
insecticides, efficacy, aerosols, *Anopheles quadrimaculatus*, *Aedes taeniorhynchus*
8403.
insecticides, efficacy, *Agrocyba orthogona* 6088.
insecticides, efficacy, *Amarasa biguttata biguttata* 7756.
insecticides, efficacy, *Aithya soccata*, *Chilo partellus*, *Contarinia*
sorghicola 5396.
insecticides, efficacy, *Delia anqua* 3733.
insecticides, efficacy, field trials, *Agrocyba orthogona* 9312.
insecticides, efficacy, *Heliothis virescens* 1474.
insecticides, efficacy, *Phaenella xylostella*, *Pieris rapae*, *Trichoplusia ni* 3799.
insecticides, efficiency, *Aphididae* 3742.
insecticides, field trials, *Callosobruchus*, *Sidna kinbergi* 8476.
insecticides, *Gasterodermis* 2938.
insecticides, growth regulators, *Spodoptera littoralis* 1837.
insecticides, isoprothion, *Aedes*, *Aedes testaceus* 5405.
insecticides, *Kerfena lycopersicella* 3755.
insecticides, larvae, *Malacosoma indica*, India 1449.
insecticides, methomyl, mortality, eggs, larvae, *Heliothis punctiger*, *Heliothis*
armigera 5380.
insecticides, methomyl, *Spodoptera frugiperda* 5416.
insecticides, penfluron, diflubenzuron, inhibition, sexual reproduction,
Poekilocentrus pictus 4619.
insecticides, permethrin, seed treatments, *Larva*, *Diatraea coarctata* 6133.
insecticides, permethrin, *Thymopitoxys ephemerarum* 2197.
insecticides, pest control, *Callosobruchus maculatus*, *Callosobruchus chinensis*
7640.
insecticides, pest control, crop fields, *Amarasa devastans* 4552.
insecticides, pest control, *Leucodermis orbonalis* 7678.
insecticides, pest control, *Phytomyza atricornis*, *Enella zinckenella* 7711.
insecticides, population growth, *Nilaparvata lugens* 6162.
insecticides, *Psila rosae* 720.
insecticides, seed treatments, *Triticum*, *Microtermes obesi*, India 5398.
insecticides, seedlings, *Abies amabilis*, *Adelges piceae* 5302.
insecticides, soil moisture effects on toxicity, *Lachnostrota consanguinea* 5337.
insecticides, stored products pests 5354.
insecticides, synergism, toxicity, *Tribolium castaneum* 7405.
insecticides, systems, aldicarb, thiofanax, bufencarb, *Bemisia tabaci*, *Empoasca*
kraemeri 6196.
insecticides, systems, *Triatoma infestans*, *Canis familiaris* 6059.
insecticides, topical applications, toxicity, comparison, *Callosobruchus*
maculatus 5781.
insecticides, toxicity, *Coccinella septempunctata*, *Brevicoryne brassicae* 7401.
integrated control, *Chilo partellus* 3033.
Isana felina isariis, insecticides activity, *Insecta* 2224.
isostearyl alcohol, surface films, efficacy, *Anopheles crucians*, mortality 6128.
juvenile hormones, instars, *Choristoneura fumiferana*, Canada, Quebec 1447.
larvicides, polycyclics, *Aedes aegypti* 317.
livestock, parasites, *Damalinia ovis*, *Linognathus pedalis*, *Linognathus ovillus*,
Australia 1746.
malara transmission vectors *Anopheles darlingi*, French Guyana 636.
malathion, *Ceratitis capitata*, USA, California 713.

Chemical control, (continued)

malathion, Phlebotomus, rain forests, Panama 1831.
methoprene, effects on reproduction, *Dendroctonus frontalis* 383.
mycosis, fungicides, Beauveria, Bombyx mori 6154
Onchocercosis vectors, insecticides, larvae, Simulium ornatum, Simulium equinum 4053.
parasites, acaricides, cattle, Boophilus microplus 5278.
parasites, cythoate, Ixodidae, Siphonaptera 4518.
parasites, karanj oil, Capra, Sarcopites scabiei 8407
permethrin, persistence, efficiency, Musca domestica 697
pest control, avoidance behavior, Coptotermes formosanus 8554
pest control, Agrotis ipsilon, India 5375.
pest control, amidinohydrazine, efficacy, Solenopsis invicta 2193.
pest control, Atherigona soccata 4369.
pest control, Atherigona soccata, Thailand 4568.
pest control, bait toxicity, Formicidae 2991
pest control, Boophilus microplus 6071
pest control, Boophilus microplus 6072.
carbofuran, Atherigona soccata 5358
pest control, Simuliidae 1359
pest control, chlorpyrifos, Blattella germanica 8557
pest control, clothing, Attagenes megatoma, Anthrenus flavipes, Tineola bisselliella 3796.
pest control, coumaphos, Boophilus, Boophilus annulatus 8531.
pest control, crop fields, Chilo partellus, Zea mays 5400
pest control, crop fields, Ctenosteus obliqua, Epiphyas postvittana, Planotortrix excessana 3816
pest control, crop fields, Cucurbita, Dacus cucurbitae 7788.
pest control, crop fields, Elanchrosis, Cryptophytus, Ctenicera 3829
pest control, crop fields, Epilachna varvatus, Glycine max, USA, Maryland 3795.
pest control, crop fields, Heliothis armigera, Diaporis watersi, Togo 2987
pest control, crop fields, Insecta 8551
pest control, crop fields, Pium sativum, Phytomyza atricornis 6897
pest control, crop fields, yield, Agrotis ipsilon, India 7723
pest control, crop fields, Zea mays, Agrotis ipsilon 3818
pest control, crop protection, conferences, Insecta 3954
pest control, crop protection, Insecta 3709
pest control, crop protection, pesticide resistance, Insecta 3713
pest control, crop yield, Brassica napus, Delta brassicae, Myzus persicae 3039
pest control, cythazatin, Panonychus ulmi 9300.
pest control, Dendroctonus brevicornis, Pinus ponderosa 8525
pest control, Diatraea saccharalis, USA, Florida 3777
pest control, diflubenzuron, Anthonomus grandis grandis 8519
pest control, diflubenzuron, efficacy, Laspeyresia pomonella 8562
pest control, economics, life cycle, Nilaparvata glumens 4590
pest control, economics, Phylloreta, Brassica campestris crop fields, Canada 8534.
pest control, efficacy, Choristoneura occidentalis 8547.
pest control, efficacy, endosulfan, Chilo partellus 7758.
pest control, efficacy, Insecta, Pinus strobus, USA, North Carolina 2982.
pest control, endosulfan, efficacy, Lipaphis erysimi 7736.
pest control, Eucalyptus, Isoparia 5374.
pest control, fenvalerate, Insecta 5326.
pest control, forestry, Dendroctonus ponderosae 9342.
pest control, fungicides, Aphis fabae 4627.
pest control, Glossina tachinoides, Glossina palpalis 9251.
pest control, hematophagy, Diptera 3656.
pest control, bives, Anis mellifera, Varroa jacobsoni 4599.
pest control, houses, Blattella germanica 3789
pest control, Insecta, Abdomoschus esculentus 7706.
pest control, Insecta, Gossypium, Nigeria 5399.
pest control, insecticides, Amsacta moorei 7685.
pest control, insecticides, Aethalia proxima, Lipaphis erysimi, Concinella septempunctata 7743
pest control, insecticides, Brevicorye brassicae 7780
pest control, insecticides, Cosmopolites sordidus 5377
pest control, insecticides, crop fields, Sorghum bicolor, Chilo partellus 7670
pest control, insecticides, Dasyneura lini 8451
pest control, insecticides, Dendroctonus frontalis, Pinus 8484
pest control, insecticides, Diacrisia obliqua 7702.
pest control, insecticides, efficacy, Oligomyza pratensis, USA, Texas 1473.
pest control, insecticides, Holotrichia serrata 5376
pest control, insecticides, horticulture, Saissetia coffeae 3792.
pest control, insecticides, Musca domestica 6894.
pest control, insecticides, pesticide applications, Aedes taeniorhynchus 7677.
pest control, insecticides, pesticide applications, Phyllocnistis citrella 7718.
pest control, insecticides, Spodoptera litura 5355.
introduced species, Liriomyza trifolii, British Isles 6896
pest control, Lepidoglyphus destructor, Triticum 8515.
pest control, Lepidoptera, Apium graveolens, USA, California 9343.
pest control, Lisonotus oregonensis, USA, Ohio 2973.
pest control, livestock, Ixodidae 4524.
pest control, Lycopersicon esculentum crop fields, Insecta, New Caledonia 4558.
pest control, malathion, Anopheles pulcherrimus, Anopheles hyrcanus, Afghanistan 9241.
pest control, Manduca sexta, Acrosternum hilare 3763.
pest control, Melanoplus sanguinipes 3813.
pest control, Pantorhytes, New Guinea 2989.
pest control, pesticides (organophosphorus), Pyriklides tenebrosus 7720.
pest control, pesticides, Planococcus citri 2189.
pest control, pheromones inhibitors, Dendroctonus frontalis 3788
pest control, Podagria uniforma, Podagria sjostedii, Nigeria 5402
pest control, population dynamics, Brevipalpus phoenicis, Indonesia 5388.
pest control, population dynamics effects on, models, Malacosoma californicum pluviale 1450.
pest control, population levels monitoring, environmental protection, Insecta 3714.
pest control, roots, Capsicum annum, Insecta 7695
pest control, stored products, Insecta 2984.
pest control, stored products, insecticides, Insecta 2190.
pest control, toxicants, efficacy, Solenopsis invicta 2192.
pest control, toxicity, insecticides, Araecerus fasciculatus 8204.
pest control, toxicity testing, insecticides, Diabrotica undecimpunctata undecimpunctata 8189.
pest control, Triticum, Microtermes obesi 5371.
pest control, vegetables, larvae, Lepidoptera 3744.

Chemical control, (continued)

pest control, yield, Vigna unguiculata, Chalchodermus acneus 8540.
pesticide applications, aerial applications, Chilocoptera demoleus, USA, Florida 3747.
pesticide applications, dosage, bioassays, Choristoneura occidentalis 4615.
pesticide applications, insecticides, particle size, Simulium 6185.
pesticide applications, methodology, Cochliomyia hominivorax 678.
pesticide residues, effects on nontarget organisms, Musca domestica 2656.
pesticide resistance, chemosterilants, benzylphenol, Musca domestica 8497.
pesticide resistance, Insecta 9437
pesticides, efficacy, comparative studies, Acari 680.
pesticides, efficacy, comparative studies, Acarna 294.
pesticides, efficacy, comparative studies, Boophilus microplus 293.
pesticides, nuts pests, Helopeltis antoni, Sri Lanka 677.
pesticides, pesticide resistance, Tetranychus urticae, British Isles 2980.
pesticides, toxicity, Aedes aegypti, Culex pipiens 1832
pesticides, toxicity, fluorolipids, Reticulitermes flavipes 1054.
pesta, chemosterilization methodology, thiotepa, Stomoxys calcitrans 5353.
pesta, comparison, methodology, Chilo partellus 7759.
pesta, crop fields, pesticide applications, electrostatic sprayer, Insecta 8486.
pesta, Earias, Pectinophora gossypiella 1444.
pesta, effects on yield, Citrus, Aonidiella auranti 8580.
pesta, ethyl formate, Myzus persicae, Frankliniella occidentalis 2939.
pesta, field trials, insecticides, fenvalerate, Phyllocnistis citrella 8445.
pesta, forest management, Insecta, Germany, Fed. Rep. 1392.
pesta, growth regulators, bioaccumulation, methoprene, cattle, Haematobia irritans 4520.
pesta, infestation, host plants, Manihot esculenta, Mononychellus caribbeanae 1428.
pesta, insecticides, Mindarus abietinus, USA, North Carolina 4336.
pesta, insecticides, petroleum, Aonidiella auranti 6906.
pesta, insecticides, Siphonaptera 7637.
pesta, methodology, dichlorvos, Megastelia halterata 1461.
pesta, pesticide resistance, Diatraea saccharalis 1430.
pesta, seeds viability, Sorghum vulgare, Atherigona 7782.
pesta, sex pheromone, inhibitors, females, Diaporis castanea 1465.
pesta, stored products, decamethrin, Zea mays, Sitophilus zeamais, Sitotroga cerealella 6192.
pesta, stored products, growth regulators, CGA-28772 9331.
pesta, stored products, methyl bromide, phosphine, Tribolium castaneum 6627.
pesta, toxicology, pesticide resistance, Insecta 3817.
phenothrin, dose-response effects, Aedes taeniorhynchus, Anopheles quadrimaculatus, Musca domestica, Stomoxys calcitrans 1401.
phenyl carbamates, Nephthothix 2995.
phenyl carbamates, Orseolia oryzae 2994.
phenyl carbamates, Tryporyza incertulas 2999.
poultry ectoparasites, food additives, Ornithonyssus sylviarum 1397.
poultry pests, Ornithonyssus sylviarum 1452.
predators, insecticides, Coccinellidae, Leis axyridis, Propylaea japonica 1417.
pyrethroids, susceptibility, developmental stages, Culex pipiens 310.
repellents, efficiency, assays, Rhipicephalus evertsi 1369.
rose bengal, erythrosin B, toxicity, Musca autumnalis 2233.
sterilization, thiotepa, pupae, Culex tritaeniorhynchus 1355.
stored products pest control, Sitophilus granarius, Tribolium confusum, Rhyzopertha dominica 7768
stored products pests, insecticides 8545
stored products pests, phosphine resistance, Tribolium castaneum 1046.
sulfur dioxide, population density, prairie, Melanoplus sanguinipes 2990.
susceptibility, insecticides, toxicity tests, Locustana pardalina 5039.
toxicity, carbofuran, Atherigona soccata 3003.
toxicity, diflubenzuron, Spodoptera mauritia 3034.
toxicity, methyl parathion, Heliothis virescens 4635.
toxicity, milbemycins, Tetranychus urticae, Panonychus citri 2662.
toxicity, pesticides, government regulation, USA 7922.
weed control, apiculture 2215
weed control, host plants, Notaris bimaculatus feeding effects on, Agropyron repens 1250.
Chemical extraction,
kairomones, Tryporyza incertulas, Scirpophaga 1218.
parathion-methyl, methodology, insecticides, bioaccumulation, Apis mellifera 1069
Chemical extracts,
queens, Apis mellifera, effects on fecundity, Tenebrio molitor 8226
Chemical perception,
attractants, effects on foraging behavior, pollinators, Apis mellifera 4577.
egg laying, host plants, Acrolepiopsis assectella 1158.
Chemical properties,
bile pigments, role, photosensitivity, Lepidoptera 2601.
host plants, phenols, host selection, Populus angustifolia, Pemphigus betae 8345.
mounds, comparative studies, Macrotermes subhyalinus, Macrotermes michaelseni 747.
specificity, aminopeptidase, larvae, Attagenes megatoma 187.
Chemical stimuli,
aromatic compounds, attractancy, pest control, Malus, Rhagoletis pomonella 8500.
attractancy, electroantennograms, Diaprepes abbreviatus 5669.
attractants, field trials, pest control, Rhagoletis pomonella 4583.
attractants, oviposition, traps, nuts, Amyelois transitella 6170.
blood meals, ATP, nucleotides, Rhodnius prolixus 5930.
effects on hoarding behavior, Apis mellifera 4322.
feeding behavior, hematophagy, Simulium venustum 5921
feeding bioassays, host plants, host preferences, Pissodes strobi 5162.
flowers, anemotaxis, Hadena bicurris, Deilephila elpenor 5866.
host plants, effects on oogenesis, Acanthoscelus obtectus 5824
host searching behavior, parasitoids, Musca domestica, Muscidifurax raptor, Muscidifurax zaporar, Spalangia cameroni, Spalangia edwardsi 8319.
larviposition, host-parasite interactions, Lixophaga diatraeae, Diatraea saccharalis 5941.
odors, oviposition, Lucilia cuprina 1917.
pheromones, antennal sensilla, electrophysiological recording, Yponomeuta 4143
pheromones, vision, effects on mating behavior, Heliothis zea 4291.
plant extracts, volatiles, effects on oviposition, oogenesis, Zea mays, Sitotroga cerealella 4270.
predators, effects on embryogenesis polymorphism, Chaoborus americanus, Daphnia sp. 572.
predatory behavior, prey capture, Notiophilus biguttatus 4359
queens, effects on aggregation behavior, colonial characteristics, Myrmica rubra

Subject Index

Chemical stimuli, (continued)

2257.
role, mating behavior, courtship, *Chrysopa perla* 4301.
swarming behavior, aggression, pheromones, workers, *Atta*, *Acromyrmex* 4651.
- Chemicals,**
pheromone traps, *Croesia semipurpurana* 2095.
- Chemoreception,**
attractancy, methylcyclohexanol, *Blattella germanica* 2593.
attractants, males, *Dacine*, Australia 3030.
axons, leg transplants, *Sarcophaga bullata* 2535.
chemical communication, pheromones, *Hyalomma dromedarii* 6686.
diets, *Bos taurus*, effects on, catchability, *Glossina morsitans*, *Glossina pallidipes*, Zimbabwe 1173.
dipropyl disulfide, oviposition attractancy, EAG responses, *Hylemyia antiqua* 3358.
ethanol, pest attack, host plants, *Picea*, *Dendroctonus rufipennis* 2843.
feeding behavior, anatomy, electrophysiological recording, *Phormia regina* 914.
flight activity, olfactory stimuli, atmospheric conditions, *Insecta* 5130.
food preferences, salts, reproduction, females, *Phormia regina* 7296.
gustatory stimuli, orientation, host plants, *Dendroctonus ponderosae* 4303.
nest mates, olfactory discrimination, odors, recognition, *Lasiglossus zephyrum* 3359.
odors, age, nutrition, *Phormia regina* 7530.
sex pheromone, deterrents, mating behavior, homosexuality, *Glossina morsitans*, *Musca domestica* 224.
volatiles, host plants, pollution effects, sulfur dioxide, pests, *Insecta* 5132.
- Chemoreceptors,**
antennal sensilla, morphology, distribution, *Hydrophila alba* 8072.
antennal sensilla, ultrastructure, *Calliphora vicina* 6529.
antennal sensilla, ultrastructure, *Hypera posica* 3289.
antennal sensilla, ultrastructure, *Scaptomyza postica* 6532.
cell surface, lectins, *Drosophila* 98.
egg laying, host plants, *Acrolepiopsis assectella* 1158.
electrical properties, morphology, *Rhagoletis pomonella* 4136.
physiology, *Entomoscia americana* 4132.
sensilla, innervation, *Aedes aegypti* 3290.
sensilla, ovipositor, *Ethorimaea operculella* 6530.
sensilla, ultrastructure, *Acerentomon majus* 3287.
sensilla, ultrastructure, role, feeding behavior, *Macrosteles fascifrons* 4362.
taste perception, larvae, *Drosophila* 4141.
ultrastructure, head hair, *Locusta migratoria* 6531.
wings, effects on feeding behavior, *Phormia regina* 1737.
- Chemosterilants,**
benzylphenol, chemical control, pesticide resistance, *Musca domestica* 8497.
bisazir, attractancy, *Glossina morsitans morsitans*, *Glossina pallidipes* 6084.
comparison, 15 compounds, *Sitotroga cerealella* 7399.
effects on fertility, *Musca domestica* 384.
effects on fertility, sex differences, *Callosobruchus chinensis* 1066.
imidocarp dipropionate, disease transmission, *Babesia bigemina*, *Boophilus decoloratus* 6064.
pest control, *Insecta* 4575.
pest control, tepa, thiopepa, hempa, thiohempa, *Dermatobia hominis* 5351.
sterilization, radiation, *Nephantis serripa* 7458.
tepa, effects on cytology, reproductive organs, *Dysdercus cingulatus* 5085.
thiopepa, chemical control, pests, chemosterilization methodology, *Stomoxys calcitrans* 5353.
- Chemosterilization,**
control programs, *Glossina morsitans morsitans*, *Glossina pallidipes*, Zimbabwe 367.
diflubenzuron, effects on hemolymph, *Anthonomus grandis* 5711.
effects on mating behavior, *Aedes aegypti*, *Anopheles atroparvus* 9046.
males, mating behavior, competition, genetics, *Anopheles culicifacies* 1902.
pest control, *Dysdercus cingulatus* 7451.
pest control, flight, sterility, spermatosa transfer, *Anthonomus grandis* 2225.
pest control, tepa, thiopepa, hempa, thiohempa, *Dermatobia hominis* 5351.
pests, chemical control, thiopepa, *Stomoxys calcitrans* 5353.
sex pheromone, pest control, *Glossina morsitans* 5268.
topical application, tepa, hempa, N,N'-hexamethylenebis 8234.
- Chemotaxis,**
anemotaxis, olfactory discrimination, *Allium cepa*, *Hylemyia antiqua* 1239.
food preferences, host plants, *Choriononea fumifera* 5161.
hosts, population dynamics, development, life cycle, *Simuliidae*, *Mammalia* 1190.
Hylemyia antiqua, *Allium cepa* 411.
males, sex pheromone, orienting response, *Periplaneta americana* 2760.
nucleotides, larvae, *Culex pipiens quinquefasciatus* 7334.
oviposition stimulants, *Lycopersicon esculentum* host plants, *Kerfena lycopersicella* 4402.
pheromones, biochemical analysis, synergism, predator-prey interactions, *Thanasimus formicarius*, *Ips typographus*, *Thanasimus femoralis* 422.
sense organs, larvae, host plants, *Hylemyia antiqua* 913.
sex pheromone, flight, visual stimuli, *Grapholitha molesta*, *Heliothis virescens* 6443.
volatiles, *Allium cepa*, microorganisms, host preferences, synergism, *Hylemyia antiqua*, *Fannia canicularis* 230.
- Chemotherapy,**
parasites, apiculture, drugs distribution, colonies, *Apis mellifera* 8570.
- Chermes abietis,**
galls, host plants resistance, *Picea excelsa* 7562.
- Chermes cliniculicoides,**
predators, effects on biological control, *Phytoseiulus persimilis* 1265.
- Chermatomyche,**
benθος, colonization, *Hydropsyche*, USA, Mississippi R 6226.
- Cheyletidae,**
parasites, morphology, *Mammalia* 92.
- Cheyletiella,**
parasites, detection methodology 2483.
parasites, feral populations, *Felis* 511.
- Cheyletiellidae,**
parasites, morphology, *Mammalia* 92.
- Chikungunya virus,**
disease transmission, comparative studies, *Ornithodoros savignyi*, *Culex*, *Aedes*, *Mansonia* 1380.
susceptibility, *Aedes albopictus* 8986.
- Chile,**
colonization, geographical distribution, population genetics, *Drosophila subobscura* 1578.
new species, taxonomy, morphology, *Metchia thysae* 7243.

Chile, (continued)

- new species, taxonomy, morphology, *Myaptext acutus* 7178.
- Chile, Straits of Magellan,**
new species, taxonomy, morphology, *Halacaroides angustus*, *Halacaroides brevoculus* 7147.
- Chilling,**
effects on nerve transmission, locomotion, *Periplaneta* 7360.
effects on pupae metamorphosis, *Galleria mellonella* 2724.
- Chilo agamemon,**
pests, infestation, varieties susceptibility, *Saccharum officinale* 6952.
- Chilo auriculus,**
biological control, parasites, *Sturmipopsis inferens* 1216.
developmental stages, parasites, biological control, suitability tests 1217.
temperature, relative humidity, effects on development 9050.
- Chilo fuscatellus,**
biological control, parasites, *Sturmipopsis inferens* 1216.
- Chilo partellus,**
activity patterns, diel variations, India 9100.
biological control, host preferences, *Apanteles flavipes* 2979.
crusts, pest resistance, varieties, *Sorghum vulgare* 7784.
emergence, diurnal variations, pests, India 5135.
hosts, parasitoids reproductive effort, *Xanthopimpla stemmator* 8315.
insecticides, toxicity, efficacy, mephosfolan 3031.
integrated control, biological control, chemical control, cultural control 3033.
integrated control, pest control, crop fields, *Zea mays* 5406.
oviposition, orientation, host plants susceptibility, pests 7680.
oviposition, reproductive behavior, host plants, *Zea mays* 7492.
pest control, chemical control, crop fields, *Zea mays* 5400.
pest control, chemical control, endosulfan, efficacy 7758.
pest control, chemical control, insecticides, crop fields, *Sorghum bicolor* 7670.
pest control, insecticides, efficacy 5396.
pest control, pest resistance, *Zea mays* 5393.
pest resistance, biochemistry, *Sorghum bicolor* 4564.
pest resistance, host plants, varieties, *Sorghum bicolor*, *Zea mays* 7732.
pests, biological control, crop protection, *Zea mays*, India 2958.
pests, chemical control, comparison, methodology 7759.
- Chilo sacchariphagus,**
reproduction, parasitism effects on, hosts 9009.
- Chilo suppressalis,**
diapause, carbohydrate metabolism, glycogen, biosynthesis, glycerol 3482.
diapause, larvae, juvenile hormones effects on 3475.
emergence, fecundity, oviposition, environmental effects, Japan 1909.
larvae, carbohydrate composition, juvenile hormones effects on, ecdysone 199.
mating behavior, diel variations, photoperiod 2743.
mating behavior, light intensity, temperature effects, females calling behavior, males response 3531.
- Chilo suppressalis,**
mating behavior, circadian rhythms, seasonal variations 2729.
- Chilocorus nigricus,**
predators, biological control, *Ternaspodorus destructor*, New Hebrides 4576.
- Chilopoda,**
bites, medical importance, Switzerland 641.
samplers, leaf litter habitat 2478.
- Chim virus,**
isolation, pathogenicity, *Ixodidae*, *Argasidae* 8985.
- China,**
forests, pest control, *Insecta* 2216.
pest control, environmental management 712.
- China, People's Rep.,**
apiculture, production 2974.
Atractomys, taxonomy, new species, identification keys 2475.
blood meals, body weight, egg production, *Dermacentor silvarum* 3704.
community composition, ecological distribution, biogeography, *Acrididae* 4450.
community composition, spatial distribution, burrows, *Citellipops tesquorum* 5895.
Neopysylla bidentatiformis 2895.
geographical distribution, morphology, taxonomy, new species, *Ancylostoma* 841.
infection susceptibility, *Plasmodium falciparum*, *Anopheles* 639.
life cycle, pests, control programs, *Lymnaea stagnalis* 4580.
life history, population dynamics, reproductive behavior, *Lycosa pseudoannulata* 6879.
new genera, new species, taxonomy, morphology, *Flavicorniculum* 3996.
new records, *Apanteles rubecula* 36.
new records, *Microthripidae* 45.
new species, geographical distribution, *Lygaeosoma* 824.
new species, *Laccobius elegans* 805.
new species, morphology, *Frontopisylla uolensis* 44.
new species, morphology, *Ichneumonys shansensis* 43.
new species, morphology, *Nupedia plicata* 813.
new species, morphology, taxonomy, *Nemoura klappericki* 3230.
new species, morphology, *Toxorhynchites changbaiensis* 25.
new species, new genera, *Calyptera* 3197.
new species, new genera, *Sarcophagidae* 24.
new species, new records, geographical distribution, *Alticinae* 6322.
new species, new parasites, *Walchia tanguangshanensis* 7.
new species, *Systropus perniger*, *Systropus microstypus*, *Systropus aurantispinus*, *Systropus bifurcus* 3991.
new species, taxonomy, *Catantopidae* 847.
new species, taxonomy, morphology, *Aponychus taishanicus* 3972.
new species, taxonomy, morphology, *Aradidae* 4008.
new species, taxonomy, morphology, *Ardeus sinensis* 4023.
new species, taxonomy, morphology, *Symbius sinensis*, *Mycetina maden* 7169.
new species, taxonomy, morphology, *Chauliops horizontalis* 4009.
new species, taxonomy, morphology, *Coenosa subflavicornis* 2411.
new species, taxonomy, morphology, *Pentatoma kummingensis* 2436.
new species, taxonomy, morphology, *Phonogaster longigenuculata* 4904.
new species, taxonomy, morphology, *Spintharus tibetensis* 2386.
new species, taxonomy, morphology, *Systropus* 8786.
new species, taxonomy, morphology, *Tabanidae* 814.
new species, taxonomy, morphology, *Tachinus* 7176.
new species, 5 species, *Cemus* 2443.
pests, incidence, *Sorghum*, *Athenogona soccata* 4559.
surveys, parasites, *Orseolia oryzae* 1013.
surveys, taxonomy, *Ceratopogonidae* 1575.
synonymy, taxonomy, *Tachinus pseudoprosimus*, *Tachinus roborowskii* 7173.
taxonomy, morphology, keys, check lists, *Leptotrombidium* 3148.

- China, People's Rep., E. China Sea,**
Pests, *Sogatella furcifera* 1443.
- China, People's Rep., Henan Province,**
identification, species composition, sex pheromone, *Ostrinia furnacalis*, *Ostrinia nubilalis* 3750.
- China, People's Rep., Hunan Province,**
life cycle, life span, temperature effects, *Telenomus euproctides* 2792.
- China, People's Rep., Liaoning Province,**
bionomics, life history, biological control, *Beauveria bassiana*, *Cryptorhynchus lapathi* 2780.
- parasites, *Complexonermis*, *Antheraea pernyi* 6007
- parasites, infection, *Doryctes paradoxus*, *Macracanthorhynchus hirudinaceus* 5289.
- China, People's Rep., Szechuan Province,**
morphology, immature stages, *Culicoides homotomus* 2502
- new records, new species, *Phlebotomus chinensis longiductus*, *Sergentomyia suni*, *Sergentomyia ruficornis* 2432.
- China, People's Rep., Tiapingshan,**
new species, taxonomy, morphology, *Culex tiapingensis* 2423.
- China, People's Rep., Yunnan Province,**
hosts, *Breutlia sergenti* vectors, *Culex pipiens pallens*, *Aedes albopictus* 5288.
- China, People's Republic, Hunan Province,**
biological control, infection, nuclear polyhedrosis virus, *Buzura suppressaria* 2649.
- Chironomus nigricrura,**
synonymy, *Neoperla tristis* 7240
- Chironanthobius darlingtoni,**
taxonomy, new species, morphology, Cuba 1606
- Chiracanthium,**
treatment, bites, stings 627
- Chiracanthium incusum,**
abundance, nectar effects on *Gossypium* 5971.
- predation, eggs, *Heliothis virescens*, USA, Texas 6124.
- Chironomidae,**
abundance, eutrophication, acidity, New Zealand, Opal L. 1485.
- abundance, species composition, lakes, reservoirs, USA, Florida 8609.
- aquatic environment, catching methods, emergence traps 6471
- Bacillus thuringiensis*, pathogens, *Bacillus thuringiensis* 1007
- benthos, community structure, biomass, lakes, New Zealand 7817
- benthos, overwintering, sediments, ice, Sweden, Vindelälven R 3648
- benthos, species composition, ecological distribution, depth, substrate preferences, Sweden, Lantjävaure L. 7020
- benthos, Venezuela, Valencia L. 621
- biological control, pathogens susceptibility, *Bacillus thuringiensis israelensis* 7651
- community composition, species diversity, pollution effects, water pollution, streams, Belgium, Antwerp 7810.
- diel periodicity, emergence, factors affecting, light, water temperature, Canada, Ontario, Windrow Farm Stream 8604
- drift, environmental effects, Australia, A.C.T., Condon Creek 753.
- ecological distribution, substrate preferences, larvae, Yugoslavia, Pek R. 566.
- eggs, parasites, new species, *Couchia circumplexa* 2152.
- emergence, diel variations, streams, Canada, Ontario 6224.
- emergence periodicity, diel activity, light effects, USA, Florida 152.
- emergence, phenology, community composition, abundance, Canada, Alberta, Bigony R. 752.
- environmental factors, emergence, Netherlands, Wolderdijk L. 751.
- feeding behavior, larvae, predation, eggs, ponds, *Ambystoma maculatum*, Canada, Quebec 1203.
- food organisms, Cyprinidae 620.
- geographical distribution, new records, rivers, France, Pyrenees 819.
- geographical distribution, species diversity, environmental conditions, bogs, Eire 7806
- heads capsules, ultrastructure, silk spinning 104.
- hematophagy, blood meals, hosts, Mammalia, Australia, Northern Territory 3678.
- immature stages, food organisms, fry, *Oncorhynchus kisutch* 2131.
- infection, parasites, *Tetrahymena*, America, Great Lakes 3608.
- infestation, pathogens, *Entomophthora culicis*, USA, New York 5036.
- karyotypes, USSR 9405.
- larvae, competition, substrate preferences, dispersion, mathematical models, USA, Michigan, Hunt Creek 2289.
- larvae, slide preparation, glycerine 1688.
- life history, population dynamics, seasonal variations, British Isles, England 4659.
- males, sensilla morphology, phylogeny 4966.
- pollution effects, insecticides, streams 5437.
- temperature effects, emergence, species composition, USA, Mississippi 750.
- temperature effects, emergence, USA, Mississippi 750.
- toxicity, *Simulium* larvae, nontarget organisms 9016.
- Chironomus,**
gene expression, temperature 9398.
- Chironomus,**
DNA purification, microsurgery, polytene chromosomes 8621.
- larvae, DNA biosynthesis, 5-fluorodeoxyuridine effects on 2299
- life cycle, ponds, tundra, USA, Alaska 5149.
- pest control, golf courses ponds, urea growth regulators 8546.
- pest control, growth regulators, urea, Bay SIR-8514 4601.
- sensilla, tarsi, ultrastructure, function, parasitism, *Nematoda* 6535.
- Chironomus annularis,**
population genetics, karyotypes, heterozygosity 8656.
- Chironomus brunneus,**
synonymy, taxonomy, *Chironomus paulfreemani* 3999.
- Chironomus crassicaudatus,**
abundance, lakes, reservoirs, USA, Florida 8609
- infestation, pathogens, *Entomophthora culicis*, USA, New York 5036.
- Chironomus decorus,**
abundance, lakes, reservoirs, USA, Florida 8609.
- community composition, correlation, algae, Canada 2295.
- infestation, pathogens, *Entomophthora culicis*, USA, New York 5036.
- population dynamics, brackishwater environment, ponds, USA, New Jersey 7014.
- seasonal variations, population levels, abundance, USA, New Jersey 5243.
- Chironomus imicola,**
tropical environment, habitat duration, pools, distribution, time 6832.
- Chironomus paulfreemani,**
synonymy, taxonomy, *Chironomus brunneus* 3999.
- Chironomus plumosus,**
biological control, pathogens, *Bacillus thuringiensis* 2218.
- community composition, correlation, algae, Canada 2295.
- larvae, polytene puffing, temperature effects, hibernation 761.
- life cycle, production, USSR, Amnema, Sevan L. 7805.
- polytene chromosomes, salivary gland, DNA, structure 7847.
- toxicity testing, methodology, pollution effects, sediments, bioaccumulation, deposit feeders 4314
- Chironomus riparius,**
benzo(a)pyrene, bioaccumulation, depuration 7813.
- community composition, correlation, algae, Canada 2295.
- heads capsules, ultrastructure, silk spinning 104.
- toxicity, pH, metals, ponds, Canada, Northwest Territories 6696.
- Chironomus tentans,**
5,6-dichloro-1,3-D-ribofuranosylbenzimidazole inhibition, transcription initiation, mRNA genes 8652
- dimethyl sulfoxide effects on polytene chromosomes, puffing 3881.
- cDNA hybridization, mRNA, salivary gland 7829.
- heat shock effects on chromosomes puffing, salivary gland 7828
- protein biosynthesis, salivary gland, developmental stages, puffing 2302.
- ribosomes, electron microscopy, salivary gland 4675.
- RNA biosynthesis, salivary gland chromosomes, galactose effects on 3873.
- salivary gland, chromosomes, Balbiani rings, restriction endonuclease mapping, DNA nucleotide sequence 7830.
- salivary gland, histology, mitochondria, ATP levels 4952.
- salivary gland proteins, biochemical characteristics, larvae 6551.
- Chironomus tepperi,**
sex determination, chromosomes, localization 3888.
- Chironomus thummi,**
Balbiani rings genes, cDNA nucleotide sequence 6247.
- cyanide, hemoglobin, heterogeneity, electrophoresis 920.
- cycloheximide, anisomycin, emetine, effects on transcription, RNA biosynthesis, salivary gland 5019.
- globin precursors, protein biosynthesis, cell-free system 3075.
- hemoglobulins, antigenicity 4990.
- immunoassays, RNA polymerase II 2586.
- larvae, salivary gland, protein biosynthesis, gene expression 3880.
- salivary gland, RNA biosynthesis, narciclasine, puromycin effects on 3882.
- temperature induction Balbiani rings, chromosomes 7827.
- Chironomus thummi thummi,**
blood, hemoglobin, hematology, proteins, amino acids, biochemical analysis 3306.
- Chironomus yoshimatsui,**
life cycle, sexual reproduction, oviposition, population dynamics, generations, Japan, Zempukiji R. 3536.
- Chiroptera,**
echolocation, auditory perception, acoustic responses evolution, *Lepidoptera* 5158.
- hosts, taxonomy, parasites indicators, *Myobidae* 5950.
- hosts, *Whartonia oweni*, Tanzania 6344.
- parasites, morphology, *Alabidocarpus minor*, *Alabidocarpus nyalii*, *Alabidocarpus intercalatus*, *Alabidocarpus pleociti*, Belgium 5652.
- parasites, species composition, new records, Insecta, Acarina, USA, Michigan 7550.
- parasites, species composition, *Nycterinidae*, Czechoslovakia 7903.
- parasites, taxonomy, morphology, *Myotomus*, South America 10.
- predators, defensive behavior, vocalization, neurophysiology, *Cynia tenera* 5914.
- predators, echolocation, auditory perception, tympanum, acoustic responses, *Lepidoptera* 4975.
- Chirosia orthostylata,**
new species, morphology, China, People's Rep. 3197.
- Chirothrips azoricus,**
new species, taxonomy, morphology, Azores 849.
- Chitin,**
biochemical analysis, abdomen, cuticle, *Locusta migratoria* 2515.
- biosynthesis, epidermis, molting, *Lithobius forficatus* 5657.
- biosynthesis, epidermis, *Plodia interpunctella*, *Galleria mellonella* 2516.
- biosynthesis, inhibition, antibiotics, tunicamycin, *Triatoma infestans* 6587.
- biosynthesis, toxicity, diflubenzuron, penfluron, *Chrotogonus trachipterus* 6620.
- Chitin synthase,**
integument, characterization, inhibition, *Trichophysa ni*, *Hyalophora cecropia* 6559.
- Chitinase,**
enzymatic activity, digestive tract, symbionts, *Neotermes bosei*, *Odontotermes* 926.
- enzymatic activity, molting, *Manduca sexta* 1766.
- Chitobiase,**
purification, characterization, integument, *Bombyx mori* 7282.
- Chlamydia,**
vectors, disease transmission, cattle, *Ornithodoros coriaceus* 8413.
- Chloebius struempeli,**
new species, taxonomy, morphology, USSR, UdSSR 4795.
- Choline,**
nervous system, larvae, *Musca domestica* 4076.
- Chilotheopis hoffmanni,**
dung, utilization, forests, *Uroxys gorgon*, *Notiobia parilis*, Panama 8370.
- Chloramphenicol,**
antibiotics, effects on hemolymph proteins, nutrient deficiency, *Apis mellifera* 8110.
- α -D-glucosidase inhibition, *Apis mellifica* 8936.
- Chloridiform,**
antifeedants, bioassays, larvae, *Spodoptera litura* 2654.
- antifeedants, effects on feeding behavior, *Manestha brassicae* 5383.
- insecticides, metabolism, larvae, diapause, *Diatraea grandiosella* 3333.
- insecticides, toxicity, nontarget organisms, *Gecoris*, *Hippodamia convergens*, *Nabis*, *Chrysopa carnea* 4227.
- pesticides, effects on hormones release, *Locusta migratoria* 5784.
- Chlorella ellipsoidea,**
toxins, aquatic environment, development, survival, *Culicidae* 6691.
- toxins effects on larvae mortality, biological control, *Culex quinquefasciatus* 1353.
- Chlorofeniphos,**
chemical control, *Delia brassicae* 2210.
- pest control, insecticides, *Delia brassicae* 2262.
- Chloride,**
effects on enzymatic activity, carbonate dehydratase, *Hyalophora cecropia* 201.
- ion exchange, distribution, digestive tract, *Acrididae* 239.

- Chloroacetaldehyde**, secondary structure modification, tRNA, nucleotide sequence, *Drosophila melanogaster* 4667.
- Chlorochroa ligata**, infestation, effects on yield, Sorghum 6164.
- Chlorocerypha consuetata**, mating behavior, courtship, display 6667.
- Chlorocyphidae**, males, anatomy, coloration, abdomen, wings 3362.
- Chlorophora tinctoria**, seeds, predation, forests, Pheidole, Costa Rica 7604.
- Chlorophos**, resistance resistance, Cimex lectularius 9434.
- Chlorophidae**, association, galls, Rudbeckia laciniata, Asphondylia helianthiglobulus 6020.
- Chloropinae**, morphology, taxonomy 2410.
- Chlorotettix camolaterus**, new species, taxonomy, morphology, Costa Rica, Cocos I. 7981.
- Chlorophosin**, insecticides, toxicity, larvae, Simulium ornatum, Simulium equium 5053.
- Chloropyrifos**, chemical control, Delia brassicae 2210.
- effects on community composition, soil, Arthropoda, USA, California 2149.
- insecticides, pesticide resistance, Blacus inularis 8191.
- insecticides, toxicity, Dendroctonus brevicornis, Enoclerus lecontei, Temnochila chloridia 4228.
- pest control, Blattella germanica 8557.
- pest control, Dendroctonus brevicornis, Pinus ponderosa 8525.
- pest control, Dendroctonus frontalis, Pinus 8484.
- Chlorops lacina**, aberrants, morphology, coloration, USA, Texas 8042.
- Chlumetia transversa**, bionomics, pests, Mangifera indica, India, Uttar Pradesh 6121.
- Cholesteryl**, chemical composition, diets, effects on growth, development, Bombyx mori 2690.
- nurseries, rearing, media (culture), development, fecundity, Corycia cephalonica 7452.
- rearing, media (culture), growth index, larvae, Corycia cephalonica 7467.
- Choleva angustata**, developmental stages, radioimmunoassay, juvenile hormones, molting hormones 205.
- Choline**, uptake, synaptosomes, central nervous system, Locusta migratoria 4964.
- Chondrilla**, activity, characterization, Schizaphys graminis 8949.
- enzyme activity, pesticides effects on, Psammotermes hybostoma 5762.
- Chondrilla juncea**, weed control, infestation effects on growth, Aceria chondrillae 9278.
- Choreutis montelli**, new records, geographical distribution, Sweden 4722.
- Chorinaeus**, taxonomy 1648.
- Chorinaeus australis**, synonymy, Chorinaeus xanthopsis 1648.
- Chorinaeus longicaudus**, taxonomy, status 1648.
- Chorinaeus rhenanus**, new species, taxonomy, morphology 1648.
- Chorinaeus xanthopsis**, synonymy, Chorinaeus australis 1648.
- Chorion**, eggs, ultrastructure, Tenobrodes mauritanicus 6489.
- gene expression, embryos, development, Saturniidae 3884.
- genes, cDNA nucleotide sequence, proteins, Bombyx mori 8630.
- genes, developmental stages, cDNA clones, Bombyx mori 6249.
- genes, organization, gene amplification, restriction endonuclease mapping, Drosophila 5454.
- loci, clones, genes, Bombyx mori 6254.
- proteins, conformational analysis, Raman spectroscopy, Bombyx mori 5825.
- proteins, genes, evolution, Bombyx mori, Antheraea pernyi 4666.
- proteins, translation, mRNA, Bombyx mori, microinjection, oocytes Xenopus laevis, cDNA hybridization analysis 8083.
- Choriotopes**, parasites, detection methodology 2483.
- Choristoneura**, pheromone traps, capture efficiency, age, density, saturation, monitoring 1679.
- Choristoneura biennis**, population genetics, North America 3130.
- Choristoneura conflicta**, surveys, pathogens, granulosis virus, Canada, Ontario, Canada, British Columbia 196.
- Choristoneura fumiferana**, biological control, infection, Bacillus thuringiensis 3041.
- biological control, pests, infection, Pleistophora schubergi 3812.
- catching methods, pheromone traps, modification 4593.
- cells, culture, bioassays, toxicity, Bacillus thuringiensis 879.
- chemical control, growth regulators, LC-62644, efficacy 6959.
- damage assessment methodology, trees 8866.
- dry weight, mathematical analysis, adults, pupae 7260.
- efficacy, pheromone traps, population studies 3753.
- eggs, susceptibility, parasitoids, Trichogramma minutum 8329.
- entomopathogenic infection, pathogenesis 7364.
- food preferences, host plants, chemotaxis 5161.
- hosts, larvae, pathogens, Entomophthora egressa 1030.
- hosts, parasitoids body size, sex differences, Trichogramma minutum 8323.
- infestation, forests, mortality, Abies balsamea, Picea glauca, Canada, Quebec 3036.
- larvae, chemical control, aminocarb, Canada, Quebec 1447.
- larvae, hemolymph, lysis, Entomophthora egressa, Paramesius caudatus, Euglena gracilis 5026.
- males, sex pheromone, flight activity 2736.
- mortality, larvae, susceptibility, pathogens, Heterorhabditis heliothidis 9014.
- nuclear polyhedrosis virus, rearing, virulence, biological control 3828.
- oviposition site preferences, larvae survival 5849.
- pathology, nuclear polyhedrosis virus 269.
- Choristoneura fumiferana**, (continued)
- pest control, atmospheric conditions, dispersal, Canada, New Brunswick 705.
- pest control, biological control, Abies balsamea forests, Bacillus thuringiensis 8472.
- pest control, sex pheromone, females tethering, methodology 5291.
- pest outbreaks, population dynamics, mathematical models 3802.
- pest outbreaks, population dynamics, mathematical models 6904.
- pests, effects on forests, damage, Canada 3779.
- phenology, mathematical models, life cycle 8285.
- polymorphism, pigmentation, larvae 5643.
- population genetics, North America 3130.
- population levels, pupae, sampling, predators effects on 5996.
- sex pheromone attractancy, disruption, synthetic components 2756.
- toxicity, paralysis, mycotoxins, Entomophthora egressa 5798.
- Choristoneura lambertiana**, population genetics, North America 3130.
- Choristoneura occidentalis**, bioassays, insecticides, pesticide applications, dosage 4615.
- biological control, pathogens, environmental impact, nuclear polyhedrosis virus, Bacillus thuringiensis, Canada, British Columbia 4589.
- enzyme polymorphism, dose-response effects, insecticides, development, larvae 4229.
- insecticides, pest control, efficacy 8542.
- insecticides, toxicity, effects on esterase polymorphism 8202.
- insects, chemical control, juvenile hormones 2954.
- laboratory animals, quality control, population genetics, heterozygosity 8658.
- life cycle, reproduction, USA, Washington 7519.
- molting inhibitors, toxicity 9031.
- mortality, pupae, predators effects on 6083.
- pest control, growth regulators, susceptibility, developmental stages 9321.
- pest outbreaks, abundance, life cycle, USA, Idaho 9305.
- pest outbreaks, species composition, life cycle, USA, Idaho 5889.
- pests, biological control, Neoplectanella carposcapae 2953.
- pests, Pseudotsuga menziesii stands, population levels, measuring techniques 8478.
- population density, predation effects on, Aves 6026.
- population genetics, North America 3130.
- spatial distribution, parasitism, Hymenoptera 2812.
- toxicity testing, insecticides, statistical analysis, body weight effects on lethal dose 8207.
- Choristoneura pinus**, infestation, predictions, Pinus banksiana, USA, Wisconsin 603.
- Choristoneura retinaria**, population genetics, North America 3130.
- Choristoneura rosaceana**, feeding behavior deterrents, leaves, Prunus persica 8301.
- Chorthippus juncidis**, cytogenetics, heterochromatin, banding, nucleolus organizer region localization 7825.
- Chorthippus mollis**, song variants, populations, hybrids 2755.
- Chorthippus parallelus**, biomass turnover, habitat utilization, food 7624.
- Chortioetes terminifera**, hosts parasites dispersal, Scolio fulgidus 4451.
- migration, flight activity, fat body lipid biosynthesis 2557.
- population dynamics, environmental effects 7601.
- Chorthippus viridifasciatus**, embryos, use 4-nitroquinoline 1-oxide, adenylylation, N-methyl-N'-nitrosoguanidine, bleomycin, clastogenicity, methodology 9412.
- Chromatin**, association heat shock proteins, characterization, Drosophila melanogaster 4158.
- detection, addition, polyelectrochromes, Drosophila arizonensis 5459.
- DNA, binding, light, Drosophila melanogaster 1510.
- isolation, proteins, Trichoplusia ni 7049.
- nucleosomes organization, Drosophila 6245.
- ribosomal proteins genes, deoxyribonuclease I, site location, Drosophila melanogaster 1503.
- Chromatography**, GLC, measuring techniques, fenvalerate, permethrin, insecticides, pesticide residues, Acrididae, Anas 1833.
- Chromulium**, radiotopes, elimination, symbiosis effects on, Gromphadorhina portentosa, Gromphadorhina schaefferi 8108.
- Chromolaena odorata**, biological control, historical account, Pareuchaetes pseudinsulata 6079.
- X chromosome**, gene expression, picornavirus mutagenesis, Drosophila melanogaster 5471.
- genes, Est-8 gene, heterozygosity, enzymatic activity, Drosophila virilis 1531.
- glucose-6-phosphate dehydrogenase genes localization, Tribolium castaneum 9387.
- inversion, effects on gene amplification, Drosophila 5469.
- lethality mutation, instability, alleles, Drosophila melanogaster 3107.
- mutation, gene mapping, Drosophila melanogaster 1505.
- mutation, markers, recombination frequency, Drosophila melanogaster 3104.
- N-nitrosopropylamine induction chromosome aberrations, Drosophila melanogaster 9019.
- recombination, Drosophila melanogaster 7843.
- recombination, variability, sex linkage, genetic variance, Drosophila melanogaster 5461.
- sex ratio, population genetics, Drosophila melanogaster 5499.
- sga-4, salivary gland, secretion, larvae, Drosophila melanogaster 2311.
- transcription, aneuploidy, Drosophila melanogaster 2301.
- Y chromosome**, DNA repeated sequence, hybridization analysis, Drosophila hydei 9386.
- lampbrush, staining methodology, Drosophila hydei 3894.
- mutants, spermatogenesis, protein composition, Drosophila hydei 2333.
- N-nitrosopropylamine induction chromosome aberrations, Drosophila melanogaster 9019.
- nucleolus organizer region mutants, analysis rRNA genes, Drosophila melanogaster 5456.
- translocations, embryos lethality, genetic control, Hylemyia antiqua 2316.
- translocations, fertility, Drosophila melanogaster 3089.
- translocations, genetic control failure, Lucilia cuprina 2348.
- transmission, entire compound second chromosome, genetic analysis, Drosophila melanogaster 9401.

Y chromosome, (continued)

trinitrophenylphosphate effects on, spermatogenesis, *Drosophila hydei* 2429.

Chromosome aberrations,

X chromosome, Y chromosome, N-nitrosopiperidine induction, *Drosophila melanogaster* 9019

inversion X chromosome, effects on gene amplification, *Drosophila* 5469

mitotic exchange, heterochromatin, *Drosophila melanogaster* 6256

radiosensitivity mutants, *Drosophila melanogaster* 8649

X radiation effects on, *Anopheles messeae* 7855

X radiation induction, cytogenetics, *Hylemya antiqua* 9404.

Chromosome number,

Aphididae 2321.

chromosomes morphology, *Deltocephalus* 2325

diploidy, chromosome B, *Somdhanaxia maras*, India 7036

karyotypes, sex determination, 6 species, *Bembidion* 4682

larvae, *Lepidoptera* 2322

meiosis, *Eriogyna pyretorum* 2430

Sarcus metallinus 2431

Chromosome 2,

structure, salivary gland, *Anopheles sinensis* 9410

Chromosome 3,

amantin resistance genes, strains, *Drosophila melanogaster* 9419.

banding, gene mapping, *Drosophila melanogaster* 3070.

mutants, hypersensitivity, methylmethanesulfonate, mustard, *Drosophila melanogaster* 3097.

recombination, genetic factors, populations, *Drosophila melanogaster* 2345.

structure, salivary gland, *Anopheles sinensis* 9410.

Chromosomes,

attachment sites, synaptonemal complex, spermatocytes, *Bombyx mori* 9406.

autosomes, heterochromatin homology, meiosis segregation, spermatogenesis, *Drosophila melanogaster* 7848

Balbain rings, restriction endonuclease mapping, DNA nucleotide sequence, *Drosophila melanogaster* 7830

banding, characterization, *Drosophila melanogaster* 3084

banding, diets effects on, enzymatic activity, Aphididae 3091

banding, heterochromatin characterization, *Drosophila hydei* 2317

banding, supernumerary heterochromatin, *Heterometus obscurus* 6260

bands, *Graphium sarpedon* 3891

bristles selection, *Drosophila melanogaster* 1513

crossing-over, hybridization, *Drosophila simulans*, *Drosophila mauritiana* 8655

cytogenetics, *Glossina pallidipes*, *Glossina austeni* 6258

cytogenetics, *Proreus* 7841

cytology, population genetics, geographical distribution, *Simulium tuberosum* 4694

cytology, taxonomy, Aphidinae 7846

damage, procabazine, *Drosophila melanogaster* 2324

deficient mutants, *Stauroneura scalans*, Spain 7034

differentiation, reproductive isolation, allotypes, *Caleda captiva* 3924

Diplotys gladiator, *Diplotys rufescens*, India 7035

drone, *Apis cerana japonica* 1546

DNA biosynthesis, *Anopheles stephensi* 2305

duplication, spermatogenesis, *Carausus morosus* 6266

embryo cells, cell culture, *Bagoicra macroplus* 875

enzyme polymorphism, alleles, loci, *Coleopila frigida* 6255

fluorescence, nucleoproteins relationship meiosis, spermatocytes, *Lepidoptera* 6262

gene mapping, gene *Sut(crc)1*, temperature-sensitive mutant, *Drosophila melanogaster* 7853.

gene mapping, rDNA genes, heterochromatin, *Drosophila melanogaster* 8636.

gene mapping, *Saturniidae* 1491.

genetic analysis, taxonomy, *Anopheles marshali* 5566.

genetic variance, *Anopheles* 4693.

geographical variations, population genetics, *Locusta migratoria* 4696.

heat shock effects on, puffing, salivary gland, *Chironomus tentans* 7828

heterochromatin, cytology, *Gastrancistrus africanus orientalis*, India 3898

inducers, sterility, hybridization, *Drosophila melanogaster* 2326

inversion role speculation, *Drosophila repleta* 8638

inversions, clones, population genetics, *Drosophila melanogaster*, Australia 3113

karyotypes, *Anthrenomus grandis grandis* 3080

karyotypes, *Carabodea*, span 3890

karyotypes, *Cninoscapda torrida*, *Dendrolinus hyrtaca*, Taragama siva, India 5468

karyotypes, *Labiduridae* 9407

karyotypes, phylogeny, *Orthocladinae* 2408

karyotypes, *Polistes* 3078.

karyotypes, role, taxonomy, classification, *Insecta* 3976.

karyotypes, systematics, classification systems, *Pentatomioidea* 7977.

karyotypes, taxonomy, *Tetranychidae* 3086

karyotypes, *Tinocallodes montanus*, India 7842.

lesions, methylmethanesulfonate, dimethylnitrosamine, males, *Drosophila melanogaster* 6264.

linkage, mutants, *Aedes albopictus* 769.

loci, codonase interaction, salivary gland, *Drosophila melanogaster* 2320.

mapping, modification genes, *Drosophila subobscura* 3060

markers, neutron radiation, X radiation effects on, spermatozoa, *Drosophila melanogaster* 2312.

meiosis, *Carabodea* 3889.

meiosis, irradiation, physicochemical properties, kinetochore, *Lepidoptera* 1516.

meiosis, karyotypes, *Hastella* 3899.

meiosis, karyotypes, *Satchelliella nubila* 3896.

meiosis, microtubules, *Drosophila melanogaster* 3893.

metaphase, banding, heterochromatin distribution, comparison *Drosophila nasuta*

nasuta, *Drosophila nasuta albocornica* 6265.

microtubules, localization, *Lepidoptera* 3079.

morphology, chromosome number, *Deltocephalus* 2325.

morphology, karyotypes, variation, *Aeshna subarctica elisabethae*, *Somatochlora*

alpestris, Switzerland 1521.

movements, Spermatocytes, spectroscopy, *Nephrotoma ferruginea* 4681.

mutation, suppressors, oocytes, spermatocytes, *Drosophila annasae* 3098.

nondisjunction, coleoid ingestion, *Drosophila melanogaster* 6263.

nondisjunction, cytoplasm, genetic effects on, *Drosophila melanogaster* 4680.

nondisjunction, genetics, inbreeding, *Drosophila melanogaster* 6257.

nondisjunction, sex differences, inbreeding, *Drosophila melanogaster* 4679.

nucleolus organizer region, activation, *Drosophila* 5452.

Chromosomes, (continued)

oogonium, spermatogonium, *Deltocephalus* 3087

orientation, organelles effects on, meiosis, *Drosophila melanogaster* 1519.

polymorphism, hybrids, taxonomy, *Lasius niger*, *Lasius alienus* 3217

polymorphism, relationship, malate dehydrogenase enzyme polymorphism, linkage

selection, *Drosophila subobscura* 9394

polymorphism, selection, statistical analysis, *Drosophila pseudoobscura* 3871.

polymorphism, absorption spectroscopy, *Drosophila melanogaster* 760.

polymorphism, antigenic characteristics, *Drosophila* 3073

polymorphism, banding, *Anopheles stephensi* 5462.

polymorphism, banding patterns, *Drosophila hydei* 7849

polymorphism, chromatin deletion, *Drosophila arizonensis* 5459.

polymorphism, DNA purification, microscopy, *Chironomus* 8621

polymorphism, dpp locus gene mapping, alleles, complementation, *Drosophila melanogaster* 8635

polymorphism, gene mapping, immunofluorescence, *Drosophila melanogaster* 8632.

polymorphism, genes, structure, *Drosophila melanogaster* 3065.

polymorphism, heterochromatin, hybrids, *Drosophila mulleri*, *Drosophila arizonensis* 5464.

polymorphism, karyotypes, *Metanephesia amphora*, *Metanephesia variabilis* 5467.

polymorphism, puffing, aluminum effects on, *Simulium vittatum* 7860.

polymorphism, puffing, dimethyl sulfoxide effects on, *Chironomus tentans* 3881.

polymorphism, replication, salivary gland, *Drosophila nasuta* 4677.

polymorphism, RNA biosynthesis, DNA methylation, *Sciara coprophila* 7833.

polymorphism, salivary gland, DNA, structure, *Chironomus plumosus* 7847.

polymorphism, salivary gland, karyotypes, *Anopheles* 9408.

polymorphism, staining, 2-propanol effects on, *Drosophila nebulosa* 7844.

population genetics, races, *Caleda captiva* 3111.

population genetics, taxonomy, *Lygeus kalmi* 6282.

puffing, ecdysterone, genetic control, salivary gland, *Drosophila melanogaster* 7821.

puffing, gene expression, protein biosynthesis, *I(1)su(n)⁸⁶⁷⁸*

temperature-sensitive mutant, *Drosophila melanogaster* 8641.

puffing, heat shock effects on, *Drosophila melanogaster* 759.

radiation damage, spermatozoa, DNA repair, oocytes, mutants, *Drosophila melanogaster* 6261.

recombination, age effects on, males, *Drosophila annasae* 5463.

replication, brain cells, larvae, *Drosophila nasuta* 4678.

replication, stability, mutation, *Drosophila melanogaster* 7037.

resistance, susceptibility, lipids, biochemical analysis, *Anopheles* 5447.

rDNA, rDNA 5S genes organization, hybridization analysis, *Drosophila melanogaster* 6244.

salivary gland, characterization, *Culex vishnui* 1518.

salivary gland, gene expression, RNA biosynthesis, *Chironomus tentans* 3873.

salivary gland, karyotypes, *Metanephesia obtusa*, India 5466.

salivary gland, mapping, *Chrysomya megacephala* 1501.

salivary gland, puffing, gene amplification, *Rhynchosciara americana* 7837.

salivary gland, puffing, heat shock, *Drosophila melanogaster* 2310.

salivary gland, puffing, protein biosynthesis, *Drosophila hydei* 5447.

salivary gland, *sxg-6* localization, *Drosophila melanogaster* 2307.

segments, cloning, *Drosophila melanogaster* 4676.

segregation, correlation, biological properties, *Drosophila melanogaster* 3090.

segregation, genetic variance, *Drosophila melanogaster* 9403.

sensitivity, mutants, *Drosophila* 7039.

sex determination, *Gerris*, *Limnoporus* 8637.

sex determination, localization, *Chironomus tepperi* 3888.

sex linkage inversions, *Simulidae* 5457.

sex linkage, recessive, mutants, bald antenna, *Anopheles albimanus* 5458.

structure, *Acrididae* 5465.

structure, relationship position effects variegation, heat shock puffing, *Drosophila melanogaster* 7840

supernumerary, heterochromatin, population studies, *Gomphocerus sibiricus* 3900.

synthesis, characterization, *Drosophila melanogaster* 3083.

temperature induction Balbiani rings, *Chironomus thummi* 7827.

transmission, population genetics, *Drosophila melanogaster*, USA, Texas 3126.

transmission (sexual) diversity, genomes elimination, *Drosophila melanogaster* 3064.

transposing elements, genomes, genes, *Drosophila* 6237.

ultrastructure, *Tenebrionidae* 9409.

Chroodromophora kelarii,

digestive tract parasites, life cycles, *Stenoductus chondromorpha* 4182.

Chronic stunt virus,

pathogenicity, mortality, *Amyelotis transiella* 5759.

Chrotopogon trachypterus,

oviposition, habitat preferences, soil moisture 5103.

Chrotopogon tra,

oviposition, substrate preferences, soil types, soil moisture 2734.

Chrotopogon trachypterus,

diffenbenzuron, penfluron, toxicity, chitin biosynthesis 6620.

food consumption, assimilation, energy utilization 8929

Chrysidae,

taxonomy, morphology, geographical distribution, reviews, North America 7112.

Chrysidoidea,

geographical distribution, origin, taxonomy, Neotropical Region 2374.

Chrysocarabus,

hybridization, coloration, morphology, *Chrysotriax* 7051

hybrids, taxonomy 3110.

Chrysocarabus auronileus,

hybrids, taxonomy 3110.

Chrysocarabus hispanus,

hybrids, taxonomy 3110

Chrysocarabus lineatus,

hybrids, taxonomy 3110.

Chrysocarabus punctatouratus,

hybrids, taxonomy 3110.

Chrysocarabus rutillus,

taxonomy, *Chrysocarabus* 3110

Chrysocarabus splendens,

hybrids, taxonomy 3110.

Chrysosaris larinellae,

parasites, biological control, historical account, *Coleophora larinella*, North America 3028

parasites, pesticides, toxicity, *Coleophora larinella* 5782

Chrysosaris pentheus,

host-parasite interactions, temperature, effects on population dynamics,

- Chrysoschiranthus pentheus**, (continued)
Phytomyza ranunculii 7577.
- Chrysoclaia razawski**,
 new records, geographical distribution, Sweden 4722.
- Chrysocoris stollii**,
 cuticle, pigmentation, control, corpora allata 8898.
- Chrysogramma**,
 taxonomy, morphology 4840.
- Chrysomella tobiasi**,
 new species, taxonomy, morphology, USSR, Uzbekistan 6428.
- Chrysomela scripta**,
 food preferences, feeding, *Populus* 8305.
- Chrysomelidae**,
 biological control, herbivores, population dynamics, agricultural ecosystems 2211.
 check lists, new records, geographical distribution, host plants, USA, Missouri 4740.
 host specificity, competition, parasites, *Heliconia*, Costa Rica 4370.
 pollination, flowering, *Rollinia mucosa*, Brazil 4410.
- Chrysomellinae**,
 larvae, morphology, keys, British Isles 5636.
- Chrysophalus aoudum**,
 food organisms, predators, new species, *Sukunahikona popei*, India 3180.
 growth regulators, RO 13-5223, effects on development 6642.
 pest control, parasites, *Aphytis holoxanthus*, USA, Texas 3798.
- Chrysophalus ficus**,
 fecundity, sex ratio, temperature effects 1883.
- Chrysomya albiceps**,
 introduced species, dispersal, geographical distribution, Brazil 9172.
- Chrysomya bezziana**,
 population studies, traps, methodology 861.
- Chrysomya chloropyga**,
 introduced species, dispersal, geographical distribution, Brazil 9172.
- Chrysomya megacephala**,
 introduced species, dispersal, geographical distribution, Brazil 9172.
- Chrysomya rufifacies**,
 sex determination, gene expression, biosynthesis 758.
- Chrysomya albiceps**,
 association, human settlements, India, West Bengal 9210.
- Chrysomya megacephala**,
 association, human settlements, India, West Bengal 9210.
 chromosomes, salivary gland, mapping 1501.
- Chrysomya rufifacies**,
 association, human settlements, India, West Bengal 9210.
- Chrysomya**,
 parasites, pest control, *Liriomyza sativae*, *Liriomyza trifolii*, USA, Texas 4600.
- Chrysosomomyia formosa**,
 parasites, emergence, temperature effects, *Liriomyza sativae* 1869.
- Chrysopa**,
 flight, wings, aerodynamic properties 6522.
- Chrysopa carnea**,
 larvae, foraging behavior, predator-prey interactions, *Acyrthosiphon pisum* 2870.
 mortality, *Allium sativum* extracts 9025.
 nontarget organisms, insecticides toxicity 8172.
 nontarget organisms, toxicity, chlordimeform 4227.
 nontarget organisms, toxicity, insecticides carriers 5785.
 pesticide resistance, larvae, enzymatic activity, pyrethroid esterase 1839.
 predators, eggs, mortality, *Empoasca fabae* 6046.
 predators, vectors, blueberry shoestring virus, disease control, insecticides, *Ilinoia pepperi* 4630.
 rearing, artificial diets 6474.
- Chrysopa chi**,
 reproductive behavior, calling behavior 5853.
- Chrysopa formosa**,
 rearing, artificial diets 6474.
- Chrysopa oculata**,
 food preferences 1197.
 reproductive behavior, calling behavior 5853.
 toxicity, insecticides, pirimicarb, carbaryl, methamidophos 318.
- Chrysopa perla**,
 mating behavior, courtship 4301.
 rearing, artificial diets 6474.
- Chrysopa rufilabris**,
 predator-prey interactions, *Pseudoplusia includens* 587.
- Chrysopa septempunctata**,
 rearing, artificial diets 6474.
- Chrysoperla carnea**,
 light traps efficacy, illumination effects on 3011.
- Chrysopidae**,
 Aphididae predators, phenology, British Isles, England 8392.
 species composition, weeds, Aphididae predators 6852.
- Chrysopilus**,
 breeding, site location, substrate preferences 3534.
- Chrysops**,
 habitat, rearing, larvae, USA, New Hampshire 2903.
 hematophagy, cattle, Canada, Quebec 2802.
 ovary development, autogeny, environmental factors, USA, New England 1131.
 pests, population levels, USA, South Dakota 8576.
- Chrysops aestivus**,
 population decline, environmental effects, grazing, weather, USA, South Dakota 4474.
- Chrysops anthrax**,
 new records, USSR, Amur 9462.
- Chrysops ater**,
 ovary development, autogeny, USA, New England 1131.
- Chrysops atlanticus**,
 abundance, distribution, crop fields, barriers effects on 2151.
- Chrysops hirsuticulus**,
 life history, sexual reproduction, blood meals, USA, California, Mendocino Co 5146.
- Chrysops mitis**,
 ovary development, autogeny, USA, New England 1131.
- Chrysoteuchia topiaria**,
 pheromone traps, efficacy 2226.
 seasonal variations, flight activity, population density 5901.
- Chrysothamnus**,
 host plants, galls, niche pattern, *Aciurina* 6792.
- Chrysothamnus nausaeus**,
 antifeedants, chemical composition, predators, *Leptinotarsa decemlineata* 521.
- Chrysotrix**,
 hybridization, coloration, morphology, *Chrysocarabus* 7051.
- Chrysura cobaltina**,
 parasites, nests association, *Osmia marginata* 1965.
- Chudalupa**,
 new genera, taxonomy, morphology, Australia, Western Australia 2379.
- Chudalupa meridionalis**,
 new species, taxonomy, morphology, Australia, Western Australia 2379.
- Chymomyidae**,
 occurrence, geographical distribution, Czechoslovakia 3937.
- Cicada**,
 Massospora phanariae, isolation, Massospora cicadettarum, pathogens 6605.
- Cicada lodosi**,
 morphology, geographical distribution, Turkey 4735.
- Cicada mordagansii**,
 morphology, geographical distribution, Turkey 4735.
- Cicadellidae**,
 abundance, construction disturbance effects on 1284.
 biological control, Southeast Asia 1451.
 X disease vectors, abundance, vegetation patterns effects on, orchards 3836.
 factors affecting colonization, orchards, X disease vectors 6173.
 flight activity periodicity, diurnal variations 6711.
 occurrence, soil, night, USA, Pennsylvania 9104.
 population dynamics, distribution, citrus blight vectors, USA, Florida 6174.
 soil assemblages, USA, Pennsylvania 5229.
 species-area relation, mathematical models 6841.
 taxonomy, revision, new families, Africa 828.
 taxonomy, revision, new families, 78 new taxa, Africa 829.
- Cicadellinae**,
 revision, Cicadellidae, Africa 829.
- Cicadelloidea**,
 morphology, identification keys, nymphs, Europe 4935.
- Cicadetta sinaitensis**,
 auditory communication, sound production (biological), song 2759.
- Cicadidae**,
 geographical distribution, Turkey 4735.
 sound production (biological), diurnal variations, tropical environment 5117.
- Cicadulina bipunctata**,
 disease transmission, plant diseases, sugarcane streak virus, sugarcane mosaic virus, Egypt, Arab Rep 8471.
- Cicler arcticum**,
 host plants, pest outbreaks, population dynamics, *Helicoverpa armigera*, India, Jabalpur 7769.
 pesticide residues, carbaryl, chemical control, *Helicoverpa armigera* 7773.
- Cicindela**,
 geographical distribution, occurrence, Canada 9496.
 morphology, keys 4804.
- Cicindela arachnoidea**,
 new species, taxonomy, morphology, Australia 4804.
- Cicindela columbica**,
 population status, occurrence, USA, Idaho, Salmon R. 7120.
- Cimicifila longilabris**,
 new records, geographical distribution, Canada, Prince Edward I., Canada, New Brunswick 9496.
- Cicindela lunulata**,
 subspecies, taxonomic revision, World 7983.
- Cicindela acellata rectilatera**,
 escape behavior, avoidance behavior, host, foraging behavior, USA, Texas 9118.
- Cicindela willisoi**,
 burrowing behavior, defense mechanisms, prey attraction, USA, Arizona, Sulphur Springs Valley 5888.
- Cicindelidae**,
 check lists, species composition, Hungary, Bikes 8683.
 hosts, population dynamics, life cycle, *Anthrax gideon*, *Anthrax analis* 8383.
 species composition, check lists, Europe 9463.
 taxonomy, morphology, new taxa, Australia 4804.
- Cimex**,
 medical importance, disease transmission, life cycle, ecology 1354.
- Cimex hemipterus**,
 aminopeptidase, cathepsin, proteinase, isolation, characterization, midgut 8950.
 sex differentiation, size, blood meals 1702.
- Cimex lectularius**,
 aminopeptidase, cathepsin, proteinase, isolation, characterization, midgut 8950.
 development, precocious effects on, teratogenesis 374.
 pesticide resistance, DDT, chlorophos 9434.
- Cimara**,
 predator-prey interactions, abundance, seasonal variations, *Pinus taeda*, USA, South Carolina 594.
- Cimara chaetostriata**,
 taxonomy, new species, morphology, India, Simla 1642.
- Cimara crosnalli**,
 rearing, methodology, life history 1682.
- Cimicidellidae**,
 geographical distribution, new records, range extension, Canada, Newfoundland 8700.
- Cionosimus**,
 taxonomy, morphology, geographical distribution 1597.
- Circadian rhythms**,
 activity patterns, environmental effects, *Blattella orientalis* 9079.
 activity patterns, physiology, *Periplaneta americana* 4985.
 calling behavior, pheromone emission, *Pseudaletia unipuncta* 5873.
 diapause, photoperiod effects on, *Sarcophaga argyrostoma* 5815.
 diapause, photoperiod effects on, *Tetranychus urticae* 3483.
 diel variations, photoperiods, sexual behavior, oviposition, *Culex quinquefasciatus* 1153.
 ecdysis release, prothoracic gland, *Samia cynthia ricini* 8980.
 emergence, light effects on, *Monarthropsus buxi* 6713.
 enzymatic activity, acetylcholinesterase, *Periplaneta americana* 154.
 enzymatic activity, insecticides, phorate, *Acheta domestica* 1794.
 feeding behavior, insecticides effects on, *Glossina austeni*, *Protophormia terranova* 5772.
 flight activity, photoperiod, *Culex pipiens quinquefasciatus* 8279.

Circadian rhythms, (continued)

- foraging behavior, *Atta insularis* 6737.
5-hydroxytryptamine, electrical properties, frontal ganglion, *Periplaneta americana* 8068.
larvae, pupae, development, hormones, prothoracicotropic hormone, *Samia cynthia* 3466.
locomotor activity, compound eyes mutants, *Drosophila melanogaster* 3304.
locomotor activity, entrainment, photoperiod, *Pterostichus nigrita* 6694.
locomotor activity, environmental effects, *Hemidena thoracica*, New Zealand 4984.
locomotor activity, feedback models, light effects, temperature effects, *Hemidena thoracica* 916.
locomotor activity, pacemakers transplantation, *Acheta domesticus* 6527.
locomotor activity, running, photoperiods effects on, *Periplaneta americana* 918.
locomotor activity, temperature effects, *Hemidena thoracica* 155.
mating behavior, adaptiveness, *Acrolepiopsis assectella* 4289.
mating behavior, geographical variations, *Acrolepiopsis assectella*, Sweden, France, Spain, Algeria 5107.
mating behavior, seasonal variations, *Chilo suppressus* 2729.
mutants, salivary gland cells fluorescence, *Drosophila melanogaster* 4982.
oscillation, mathematical models, *Drosophila* 1741.
oviposition, hatching, eggs, adult eclosion, *Atherigona soccata* 4983.
oviposition, photoperiod, *Ostrinia nubilalis* 9045.
photoreception, thermoregulation, *Coccinella septempunctata*, *Aphis* 8923.
photoperiod, photoreceptors, reviews, *Insecta* 8922.
photoperiods, *Pennis brassicae* 917.
predatory behavior, *Sphecidae* 9128.
sexual behavior, *Ameylos transtella* 5838.

Circotettix rubula rubula,

color matching, visual stimuli, substrate preferences, polymorphism 4318.

Circulation,

abdomen, motor activity, penstals, *Culicidae* 5661.

Circulatory system,

hemolymph, metabolism, *Periplaneta americana* 4989.

neuroendocrine system, anatomy, neurosecretors, *Bagrada cruciferarum* 993.

Circulifer tenellus,

vectors, identification, enzyme-linked immunosorbent assay, beet curly top virus 9273.

Cirphis unipuncta,

cold tolerance, overwintering, larvae, pupae 6864.
development, diapause, environmental effects, temperature, photoperiod, seasonal variations 7470.

Cirsium arvense,

host plants, galls, emergence, *Urophora cardui* 8354.

weed control, biological control, galls, *Urophora cardui*, Canada 3805.

weed control, *Ceutorhynchus lura*, Canada, Ontario 2952.

Cirsium canescens,

host plants, infestation, *Corythucha distincta*, USA, Nebraska 9163.

host plants, infestation, damage, *Corythucha distincta*, USA, Nebraska 5198.

predators, seeds, *Paracantha culta*, *Orellia occidentalis*, *Homoeosoma stypicellum* 5884.

seeds, destruction, predators, *Paracantha culta*, *Orellia occidentalis*, *Homoeosoma stypicellum* 9105.

Cis-aldriindiol,

dieldrin metabolites, acute toxicity, *Blaberus discoidalis* 301.

9-Cis-tricosene,

sex pheromone, biological control, *Musca domestica* 743.

Clapia,

wings, venation, malformations, India 6509.

Cistrons,

ribosomes, salivary gland cells, *Drosophila mulleri*, *Drosophila arizonensis* 5446.

Citellipolius tesquorum sungaris,

community composition, spatial distribution, burrows, China, People's Rep. 2895.

Citharuscanthus,

taxonomy, morphology, Costa Rica 3173.

Cithorenia laccosa,

life cycle, morphology, immature stages, Brazil, Sao Paulo 6492.

Cithrona regalis,

mortality, larvae, rearing 7620.

Citrus,

effects on, pests, effects on yield, *Aonidiella aurantii* 8580.

host plants, damage, pest outbreaks, *Araecerus fasciculatus*, USA, Florida 4613.

pests, new records, infestation, *Othreis fullonica*, *Othreis materna*, India, Punjab 7790.

Citrus blight,

vectors, distribution, Cicadellidae, USA, Florida 6174.

Citrus sinensis,

fruit trees, pest outbreaks, seasonal variations, *Araecerus fasciculatus*, USA, Florida 4541.

Cixius,

taxonomy, new species, USA, Mexico 6426.

Cladardis cetica,

new species, taxonomy, morphology, Crete 6427.

Cladotanytarsus levis,

allergens, hypersensitivity (immediate), man, Sudan 1370.

Cladoceros mexicanus,

new records, geographical distribution, Bolivia 7157.

Clambidae,

new species, taxonomy, morphology, Denmark 4783.

taxonomy, phylogeny, biogeography, new species, North America 1576.

Clanoseurum americanum,

feeding behavior, larvae, saline environments, *Suaeda linearis* 5904.

Claraeola crassula,

new species, taxonomy, morphology, USSR 6395.

Claricornaltica scherer,

new species, taxonomy, morphology, India 7160.

Classification,

cladistic analysis, phylogeny, families, *Julida* 9441.

Euxoa detrita, North America 8839.

feeding behavior, interspecific relationships, *Leguminosae*, *Bruchidae* 1388.

morphology, host plants, *Podopinae* 3251.

nomenclature, *Nessaea* 839.

phenotypes, morphology, 33 species, *Dichroplus* 8892.

reviews, taxonomy, *Coniopteryx* 4902.

systematics, taxonomy, *Insecta* 3169.

systematics, *Xerocoenopteryx*, *Coniopteryx* 2468.

taxonomy, taxonomy, *Eucolidae* 8712.

Classification, (continued)

taxonomy, computer programs, *Arthropoda* 1586.

taxonomy, keys, *Leptotrombidium*, China, People's Rep. 3148.

taxonomy, morphology, *Isohyphus smreczynski*, *Isohyphus weglarskiae*.

Isohyphus volubilis 8842.

taxonomy, phenology, *Andrena*, Japan 6433.

taxonomy revision, *Coniopteryx* 1664.

taxonomy revision, *Melittaeae* 1661.

taxonomy, role, chromosomes, *Insecta* 3976.

taxonomy, *Tineidae*, *Symmoca*, *Pterophoridae*, Spain, Portugal 2466.

wings coloration, morphology, *Trimerotropis sparsa*, USA, Nebraska 8890.

Classification systems,

blood cells, hematology, *Nepa cinerea* 992.

biology, taxonomy, *Hebridae* 4860.

nomenclature, taxonomy, *Hydroporus* 477.

phylogeny, evolution, *Psocodea* 8669.

systematics, karyotypes, *Pentatomidae* 7977.

systematics, role, conservation, *Lepidoptera* 4760.

taxonomy, phylogeny, *Vespoidea* 4873.

taxonomy, *Tenebrionidae* 4794.

Clastogenicity,

methodology, use, 4-nitroquinoline-1-oxide, adriamycin, bleomycin,

N-methyl-N'-nitrosoguanidine, embryos, *Chortophaga viridifasciata* 9412.

methyl methanesulphonate, N-nitrosodimethylamine, *Drosophila melanogaster* 9413.

Claudivania miranda,

new genera, new species, India, Sri Lanka 4883.

Clavelocnemis besaumont,

new species, taxonomy, morphology, USSR, Turkmenistan 8823.

Clavigralla elongata,

eggs, parasitoids, Africa 2814.

Clavigralla gibbosa,

pests, crop fields, *Cajanus cajan* 4553.

Clavigralla tomentoscillia,

eggs, parasitoids, Africa 2814.

Claytonia virginica,

flowering, coevolution, pollinators feeding behavior, *Andrena erigeniae* 525.

pollinators, *Andrena erigeniae*, *Bombus* major, USA, North Carolina 2065.

Cleaning,

methodology, specimens, *Lepidoptera* 63.

pollen, apiculture, methodology, *Apis mellifera* 1406.

Cleaning behavior,

breeding, American foulbrood disease resistance, apiculture, *Apis mellifera* 3823.

Clear cutting,

effects on abundance, forest floor litter, *Arthropoda* 2111.

effects on community composition, forests, *Araneae*, USA, Appalachian Mts. 6042.

forests, effects on competition, food sources, *Carabus limbatus*, *Carabus sylvosus* 8367.

Cleavage,

enzymes, biochemical characteristics, larvae, *Attacus megaloma* 957.

Clemensia albata,

feeding, fecundity, life cycle, *Protoparce viridis* 7509.

Cleora cinctaria,

hosts, parasites host searching behavior, *Poecilostictus cothurnatus* 2020.

Cleora injectaria,

infestation, defoliation, *Avicennia alba*, Thailand 2853.

Cleptoparasitism,

effects on nesting behavior, foraging behavior, *Agapostemon virescens*, *Nomada* 1946.

effects on population regulation, *Coelioxys rufocaudata*, *Megachile rotundata* 4375.

evolution, *Ammophila aberti* 2021.

foraging behavior, colonies, *Melipona rufiventris flavolineata* 6743.

new records, *Araneae*, *Cecidomyiidae*, USA, Florida 1995.

predation, feeding behavior, *Argyrodes* 1996.

Cleradini,

taxonomic revision, new species, new genera, Australia 3210.

Clitaditum microcephalum,

host plants, nesting behavior, *Coleoptera*, *Formicidae* 4396.

Climacia,

taxonomy, morphology, Brazil, Amazon Basin 4054.

Climate,

effects on abundance, *Dacus opiliae*, *Dacus tenuifascia*, Australia 3636.

effects on pest outbreaks, mathematical models, *Agrotis segetum*, Denmark 5412.

effects on pest outbreaks, statistical analysis, forests, *Dendroctonus frontalis* 2961.

Climatic conditions,

effects on feeding behavior, *Lymantia monacha* 491.

effects on migrations, *Nilaparvata lugens* 562.

long-term effects, photoperiod, temperature, development, *Pterostichus nigrita* 7443.

Climbing,

emergence, body size, larvae, *Luciola cruciata*, Japan, Kiyotaki R. 3861.

trees, larvae, *Neodiprion sertifer*, Finland 7522.

Clines,

color polymorphism, population genetics, *Phaulacridium vittatum* 2344.

genetics, wings, variations, *Heteronympha merope merope*, Australia 3925.

population genetics, chromosomes inversions, *Drosophila melanogaster*, Australia 3113.

Clinocentrus gracilipes,

parasites, venom effects on hosts development 502.

Clioperla proprium,

taxonomy, morphology, developmental stages 1672.

Clistorapha ventosa,

synonymy, *Eremotylus boguschi* 4026.

Clitellum,

embryogenesis, endocrine system 2671.

Clitellum extradentatus, embryogenesis, midgut, ultrastructure 4247.

Cloeon cognatum,

life history, regeneration, gills, metamorphosis, light intensity 1950.

Cloeon fluviatile,

longevity, life history, freshwater environment, Australia, Northern Territory, Magela Creek 4657.

Cloeon simile,

new records, ecological distribution, Czechoslovakia, Latorica R. 2355.

Subject Index

- Clogmia**, taxonomy, synonymy, nomenclature 7960.
- Clones**, cell lines, cyclic AMP, cyclic GMP, *Drosophila melanogaster* 2571. cell lines, immunology, *Drosophila melanogaster* 2513. development, labelling cells, *Drosophila* 757. development variation, herbivores, host-parasite interactions, *Solidago*. *Uroleucon caligatum* 5963. DNA, genetic analysis, *Drosophila melanogaster* 1495. DNA, genomes, reviews, *Drosophila melanogaster* 6248. cDNA, chorion genes, developmental stages, *Bombyx mori* 6249 genes, chorion loci, *Bombyx mori* 6254. growth models, wings, epithelium, *Drosophila* 97. larvae, wing discs distribution, *Drosophila* 339. pest resistance, host plants, *Malus domestica*, *Panonychus ulmi* 5312. pest resistance, host plants, *Sitobion avenae*, *Triticum aestivum* 2986.
- Clothing**, chromosomes segments, *Drosophila melanogaster* 4676. cut locus, *Drosophila melanogaster* 9383. genes, heat shock induction mRNA, *Drosophila melanogaster* 3877.
- Clonopsis gallica**, eggs, ultrastructure, population studies 6634.
- Clothing**, pest control, feeding, permethrin, *Attacus megaloma*, *Antherus flavipes*, *Tineola bisselliella* 3796. repellents, pest control, *Arthropoda* 8962.
- Clothing**, hemolymph, immunochemistry, *Leucophaea maderae* 4147.
- Clubiona cambridgei**, parasitism, oviposition, *Epipompilus insularis* 6756.
- Clubionidae**, new records, predators, *Spodoptera litura*, India, Andhra Pradesh 1439.
- Clustering**, eggs, association, *Lycanidae*, *Mymecophilidae* 1193.
- Clytaceus**, geographical distribution, Germany, Fed. Rep., Bavaria, Murnauer Moos 4730. geographical distribution, Germany, Fed. Rep., Bavaria, Murnauer Moos 4730.
- Clytrinae**, reclassification, genera, Nearctic Region, Neotropical Region 7945.
- Clytus arcticus**, introduced species, occurrence, Eire 9451.
- Cmida carrolli**, habitat, distribution, host plants, *Pseudotsuga menziesii* 4471.
- Cnaphalocrocis medialis**, age composition, breeding status, seasonal variations, Japan 7797. mating behavior, temperature effects 1138. occurrence, geographical distribution, Japan 9475. synonymy, new species, *Marmasia patnalis*, Southeast Asia 842.
- Cnemidorthiza**, taxonomy, new subgenus, morphology 1656.
- Cnephias stephensiana**, new records, geographical distribution, Canada 8699.
- Cnephocyma**, new genera, Australia 4748. new genera, taxonomy 8800.
- Coastal environment**, airborne dispersal, *Tetragnatha*, Japan, East China Sea 2101. environmental effects, brackish water, survival, *Myrmica rubra*, *Myrmica scabrinodis*, *Lasius flavus*, *Lasius niger* 4455. natural disturbance, predation, effects on distribution, seasonal variations, algal blooms, population changes, *Diptera* 8602.
- Coastal waters**, pests, habitat, *Culex salinarius*, USA, New Jersey Coast 6054.
- Cobalt**, nervous system mapping methodology, *Schistocerca gregaria* 8844.
- Cobalt chloride**, effects on lipid composition, silk gland, *Bombyx mori* 6588. effects on silk gland glycogen, *Bombyx mori* 6585.
- Cobra venom factor**, effects on immunity, *Galleria mellonella* 1071.
- Coccinella**, ovary, ultrastructure, cytoplasm transport 1077.
- Coccinella bilineata**, predator-prey interactions, *Nilaparvata lugens*, new records, geographical distribution, India 3565.
- Coccinella californica**, foraging behavior, hunger, abundance, predator-prey interactions, *Acyrtosiphon pisum* 2872. larvae, foraging behavior, predatory behavior 2869. predator-prey interactions, feeding behavior, egg production, temperature effects, *Acyrtosiphon pisum* 2878. predator-prey interactions, population dynamics, movements, *Acyrtosiphon pisum* 2877.
- Coccinella novemnotata**, predators, eggs, mortality, *Empoasca fabae* 6046.
- Coccinella septempunctata**, biological control, *Monellia caryella*, *Monelliopsis nigropunctata*, *Melanocallis caryaeifoliae* 694. circadian rhythms, photoreception, thermoregulation 8923. DNA biosynthesis, RNA biosynthesis, fat body 935. insecticides, toxicity, pest control 7401. mortality, *Allium sativum* extracts 9025. oogenesis, diets effects on 1114. population dynamics, crop fields, pests, Germany, Fed. Rep. 9339. settling behavior, host plants, *Aphididae* population density effects on 2865.
- Coccinella transversoguttata**, predators, host plants effects on, *Myzus persicae* 723.
- Coccinella transversoguttata**, food preferences 1197.
- Coccinella trifasciata**, larvae, foraging behavior, predatory behavior 2869. predator-prey interactions, feeding behavior, egg production, temperature effects, *Acyrtosiphon pisum*, predator-prey interactions 2878. predator-prey interactions, population dynamics, movements, *Acyrtosiphon pisum* 2877.
- Coccinella undecimpunctata**, larvae, foraging behavior, predatory behavior 2869.
- Coccinellidae**, abundance, construction disturbance effects on 1284. *Aphididae* predators, phenology, British Isles, England 8392. community structure, species composition, *Malus orchards* 9190. contact dermatitis, case reports, man 3680. defense mechanisms, taste aversion, *Plasmodium colchicus* 9120. diets, feeding behavior 5167. factors affecting community composition, vegetation patterns 9191. food consumption, predation, predator-prey interactions, *Acyrtosiphon pisum* 2875. predation, foraging behavior, prey population density 6739. predator-prey interactions, population density, population dynamics, environmental effects, *Acyrtosiphon pisum* 2886. predators, biological control, *Tennaspisidius destructor*, New Hebrides 4576. predators, chemical control, insecticides, *Leis axyridis*, *Propylaea japonica* 1417. predators, morphology, *Exochomus flaviventris*, *Exochomus concavus*, *Huperaspis senegalensis*, Congo, People's Rep. 4104. predators, pest control, *Rhopalosiphum maidis*, *Zea mays* 5295. sexual reproduction, life cycle, predator-prey interactions, *Acyrtosiphon pisum* 2871. species composition, weeds, *Aphididae* predators 6852. surveys, Korea 785. taxonomy, synonymy, Neotropical Region 7956.
- Coccinidae**, geographical distribution, new records, Hungary 2441. kermesic acid, anthraquinones, synthesis 4154. parasites, new records, geographical distribution, Poland 9467. parasites, species composition, host plants, *Lycosominae*, Africa 5206. species composition, new records, Puerto Rico 3951. zoogeography, geographical distribution, origin, islands, Indian Ocean, West 4708.
- Coccophagus**, effects on biological control, parasites, *Metaphycus swirskii*, *Saissetia oleae* 5175.
- Coccophagus cowperi**, oviposition, host preferences, males eggs 2732.
- Coccophagus lycimnia**, *Tapasoma nigritarsis*, *Metaphycus*, interspecific relationships, parasitism, France 3612.
- Coccophagus sanguinarius**, life cycle, host plants, feeding, *Acer rubrum*, USA, Pennsylvania 5902.
- Coccus capensis**, synonymy, taxonomy, *Coccus phyllicae* 2437.
- Coccus celatus**, taxonomy, geographical distribution, synonymy, *Coccus consimilis*, Papua New Guinea 3215.
- Coccus consimilis**, synonymy, *Coccus celatus* 3215.
- Coccus elatensis**, new species, taxonomy, morphology, Israel 2442.
- Coccus gymnospori**, taxonomy, morphology, Israel 2442.
- Coccus heperidum**, biological control, parasites, eggs encapsulation, *Metaphycus swirskii* 5175.
- Coccus phyllicae**, synonymy, *Coccus capensis* 2437.
- Coccus viridis**, predators, biology, *Coelophora quadrivittata*, New Caledonia 2774.
- Coccygnomus disparis**, parasitoids, pest control, biological control, *Lymantria dispar*, USA, Connecticut 8466.
- Coccygnomus turionellae**, parasitoids, host effects on development 8330.
- Cochliomyia hominivorax**, accessory gland, reproduction, ablation, hatchability, fertility, females 1853. age methodology, morphology, apodeme 8017. breeding, eggs survival, manure 6037. chemical control, pesticide applications, methodology 678. control programs, eradication, USA 1459. cytogenetics, larvae 2309. genitalia, morphology, mating effects on 8212. larvae, pests, biological control 3007. pest control, biological control programs, suppression, populations 8560. pest control, nontarget organisms, *Diptera*, USA, Southwest 2206. pupae storage, temperature effects, adults longevity, flight activity 1868. sex pheromone, chemical composition, effects on reproductive behavior 221.
- Cochliomyia maculalis**, taxonomy, synonymy, *Protophormia howardae* 7183.
- Cochliochia**, taxonomy, morphology, 9 new species 8803.
- Cochlospermum vitifolium**, reproduction, outcrossing, pollinators, foraging behavior, Central, Panama 6787.
- Cassia**, crop yields, pest control, spatial distribution effects on, *Bathycoria thalassina* 581.
- Coccolut**, pests, chemical control, insecticides, *Nephantis serinopa* 1396.
- Coccons**, *Callotama promethaea*, larvae, food plants, associations, USA, Michigan 2070. case construction, composition, *Bombus atratus* 8982. construction, maternal behavior, *Uloborus ferox* 6672. construction, silk, *Hyalophora cecropia* 5887. enzymatic activity, carbohydrate metabolism, *Bombyx mori* 2561. genetic variance, population genetics, *Bombyx mori* 9428. larvae, silk secretion, *Glyphocampa nana* 5016. parasites, abundance, life cycle, *Dipron pini* 7541. physical properties, breeding, selection, *Bombyx mori* 9427. physical properties, correlation, selection, *Bombyx mori* 9432. silk glands, weight, strains, hybrids, *Bombyx mori* 6963.
- Cocos nucifera**, food organisms, infestation, larvae, *Spodoptera exempta* 478.
- Coccygnomus turionellae**, parasitoids, nutrition, nitrogen uptake, *Lymantria dispar* 8326.

- Codliacum variegatum**, host plants, distribution, *Tetranychus cinnabarinus* 2084.
- Coelioxys bisoncornua**, new records, geographical distribution, range extension, USA, Illinois 6327.
- Coelioxys ruficaudata**, new records, geographical distribution, USA, East 9494.
- Coelioxys ruficaudata**, Cleptoparasitism, effects on population regulation, *Megachile rotundata* 4375.
- Ceolomomyces**, pathogens, new records, *Aedes cinereus*, Sweden 8139.
- Ceolomomyces africanus**, host range, first record, Culicidae, Angola 1271.
- Ceolopea frigida**, enzyme polymorphism, chromosomes, alleles, loci 6255.
- Ceolopea frigida**, population genetics, genetic variance, loci, enzymes, alcohol dehydrogenase 6278.
- Ceolophora quadridentata**, biology, predators, *Coccus viridis*, New Caledonia 2774.
- Ceolotanyus scapularis**, benthos, Venezuela, Valencia L. 621.
- Ceolotes atropus**, feeding, growth, temperature effects on 5715.
- Ceolotes atropus**, zoogeography, Switzerland 7900.
- Ceolotes inermis**, zoogeography, Switzerland 7900.
- Ceolotes mediocris**, zoogeography, Switzerland 7900.
- Ceolotes pabulifer**, zoogeography, Switzerland 7900.
- Ceolotes pastor pickardi**, zoogeography, Switzerland 7900.
- Ceolotes pastor tholensis**, zoogeography, Switzerland 7900.
- Ceolotes rudolfi**, zoogeography, Switzerland 7900.
- Ceolotes terrestris**, zoogeography, Switzerland 7900.
- Coenagrion puella**, avoidance behavior, predation, environmental conditions 1289.
- Coenagrion resolutum**, food availability, effects on growth, survival, spatial distribution 7808.
- Coenagrion resolutum**, life cycle, diets, nymphs, Canada, Alberta 3056.
- Coenagrion scitulum**, copulation, morphology 5645.
- Coenosia subflavicornis**, new species, taxonomy, morphology, China, People's Rep. 2411.
- Coenotaphus**, habitat selection, community structure, speciation, host plants, Cruciferae.
- Coenotaphus**, Anthocharis cardamines 8348.
- Coenotaphus**, host plants, species diversity, Apidae, North America 1564.
- Coenotaphus**, host plants trees, herbivory, insects, British Isles 2846.
- Coenotaphus**, interspecific relationships, pollinators, pollination, *Trifolium pratense*, *Bombus* 5195.
- Coenotaphus**, pollinators feeding behavior, flowering, *Andrena crigeniae*, *Claytonia virginica* 525.
- Coenotaphus**, Umbelliferae, furanocoumarins, herbivores, Oecophoridae, Papilionidae 2079.
- Coexistence**, competition, effects on, body size, caves, *Pseudonaphthulus menetriesi*, *Pseudonaphthulus pubescens* 1488.
- Coexistence**, competition, nests, *Camponotus laevigatus*, *Formica haemorrhoidalis* 6855.
- Coexistence**, competition, niche overlap, Hispidae 8366.
- Coexistence**, energetics, life history, Ephemerella, USA, Pennsylvania, White Clay Creek 5430.
- Coexistence**, foraging behavior, diets, Holcocephala abdominalis, Holcocephala calva, USA, Maryland 6029.
- Coexistence**, habitat, girdles, *Oncideres pustulata*, 19 species, Cerambycidae 5981.
- Coexistence**, pools habitat, streams, Dytiscidae, Culicidae, USA, Arizona, Dry Creek 9372.
- Coexistence**, resource utilization, dung, guilds, *Apodius* 9211.
- Cola acuminata**, host plants, oviposition, development, *Balanogaster kolae* 8352.
- Cola verticillata**, host plants, oviposition, development, *Balanogaster kolae* 8352.
- Colaradia pandora**, pupae, eggs, spatial distribution, trees, USA, Arizona 6035.
- Colaspis chapulensis**, new species, taxonomy, morphology, Mexico, Jalisco 8769.
- Colcemid**, effects on polyploidy, aneuploidy, *Drosophila melanogaster* 6263.
- Colchicine**, effects on longevity, photoconduction, pigments, *Vespa orientalis* 4948.
- Colchicine**, effects on mechanoreceptors, electrical properties, *Periplaneta americana* 3291.
- Cold**, effects on nerve transmission, locomotion, *Periplaneta* 7360.
- Cold**, temperature effects, diapause, emergence, *Pikonomia alaskensis* 3495.
- Cold acclimation**, oxygen consumption, *Cryptolestes ferrugineus*, *Oryzaephilus surinamensis*, *Rhyssalus dominica*, *Tribolium castaneum* 3369.
- Cold hardiness**, acclimation, starvation, *Nanorhynchus antarcticus*, *Alaskozetes antarcticus*, *Stereotydeus villosus*, *Gamasellus racovitzai*, Antarctica, Signy I. 6579.
- Cold hardiness**, acclimation, survival, *Cryptopygus antarcticus*, *Parisotoma octoculata*, Antarctica, Signy I. 6583.
- Cold hardiness**, acclimatization, *Rhyssalus fagi* 1792.
- Cold hardiness**, supercooling, *Collembola*, Acari, Diptera, Belgica antarctica, *Cryptopygus antarcticus*, Antarctica 3364.
- Cold resistance**, metabolism, hibernation, *Dendroctonus micans* 6560.
- Cold temperature**, winter mortality, eggs, *Lymantria dispar*, Canada, Quebec 2127.
- Cold tolerance**, adaptations, Acari, *Collembola*, Antarctica 8102.
- Cold tolerance**, adaptations, alpine environments, Insecta, Canada 8103.
- Cold tolerance**, adaptations, biochemistry, Insecta 956.
- Cold tolerance**, adaptations, survival, polar environments, Insecta, Canada 980.
- Cold tolerance**, diapause, pupae survival, *Heliothis virescens*, *Heliothis zea* 3627.
- Cold tolerance**, eggs, *Entomoscila americana* 2876.
- Cold tolerance**, eggs, seasonal variations, diapause, *Rhopalosiphum insertum* 6638.
- Cold tolerance**, freezing, adaptations, Insecta, Antarctica 2730.
- Cold tolerance**, freezing, alpine environments, Oribatei, Austria, Alps 3553.
- Cold tolerance**, (continued) metabolism, respiration, acclimation, Belgica antarctica 8107.
- Cold tolerance**, overwintering, larvae, pupae, *Cyrtus unipuncta*, *Plusia gamma* 6864.
- Cold tolerance**, overwintering, metabolism, larvae, *Eurosta solidaginis* 4254.
- Cold tolerance**, overwintering, strains, *Myzus persicae* 5893.
- Cold tolerance**, physiology, polar environments, Acari, *Collembola* 979.
- Cold tolerance**, poikilotherms, thermoregulation, survival, *Alaskozetes antarcticus* 976.
- Cold tolerance**, population-environment relations, geographical variations, divergence, *Eurosta solidaginis* 2603.
- Cold tolerance**, supercooling, freezing, metabolism, *Eurosta solidaginis* 4144.
- Cold tolerance**, survival, fecundity, genetic drift, *Drosophila melanogaster* 3926.
- Cold tolerance**, survival, juveniles, *Argyro aurantia* 6028.
- Cold tolerance**, survival, mating, nutrients, *Tatohia* 6698.
- Cold tolerance**, winter survival, aggregation, *Hippodamia quinquesignata*, Canada, Alberta 3637.
- Colemeigilla maculata lengi**, predators, vectors, blueberry shoestring virus, disease control, insecticides, Illinois pepper 4630.
- Colemeigilla maculata**, population density, predator-prey interactions, temperature effects on, *Myzus persicae* 6022.
- Colemeigilla maculata**, sampling, *Myzus persicae* 584.
- Colemeigilla maculata lengi**, mortality, overwintering, crop fields, Canada, Ontario 6021.
- Colemeigilla maculata lengi**, toxicity, insecticides, pirimicarb, carbaryl, methamidophos 318.
- Coleophora alnifoliae**, life history, geographical distribution 5881.
- Coleophora alnifoliae**, parasitism, ecological distribution, altitude, host-parasite interactions 4371.
- Coleophora discordeella**, parasites, emergence, infestation 5180.
- Coleophora drymida**, taxonomy, morphology 3223.
- Coleophora escalerae**, taxonomy, morphology, synonymy, *Coleophora turolella* 3223.
- Coleophora flaviella**, taxonomy, morphology 3223.
- Coleophora hafneri**, taxonomy, morphology, synonymy, *Coleophora oriolella* 3223.
- Coleophora hafneri**, North America 3028.
- Coleophora hafneri**, toxicity, pesticides 5782.
- Coleophora laticostella**, taxonomy, morphology 3223.
- Coleophora laticostella**, taxonomy, morphology 3223.
- Coleophora machinella**, occurrence, British Isles, England 9446.
- Coleophora multipennis**, life history, geographical distribution 5881.
- Coleophora oriolella**, taxonomy, morphology, synonymy, *Coleophora hafneri* 3223.
- Coleophora partitella**, new records, geographical distribution, Sweden 4722.
- Coleophora pellicorella**, taxonomy, morphology 3223.
- Coleophora squalella**, new records, occurrence, Netherlands 9478.
- Coleophora turolella**, taxonomy, morphology, synonymy, *Coleophora escalerae* 3223.
- Coleophoridae**, taxonomy, morphology, synonymy 3223.
- Coleoptera**, abundance, pathogens, ponds 1007.
- Coleoptera**, allochthonous input, streams energetics 8373.
- Coleoptera**, association, abundance, beaches, *Ecklonia maxima*, *Laminaria pallida* 541.
- Coleoptera**, association, Ascomycetes, Tunisia 9152.
- Coleoptera**, biological control, natural enemies, competition, Homoptera, Lepidoptera 6095.
- Coleoptera**, borers, biology, behavior, control 3628.
- Coleoptera**, catalogs, species composition, France, Pyrenees 9456.
- Coleoptera**, catching methods, machinery, rapid suction method 7247.
- Coleoptera**, check lists, species composition, France, Pyrenees Mts., Spain, Pyrenees Mts. 7075.
- Coleoptera**, community composition, succession, developmental stages, lakes, Sweden 3857.
- Coleoptera**, community composition, zonation, geographical variations, crop fields, Finland 5299.
- Coleoptera**, entomofauna, rare species, Sweden, Hallfors Hage 4725.
- Coleoptera**, fauna, species composition, crop fields, Avena, Finland 2220.
- Coleoptera**, food organisms, Cyprinidae 620.
- Coleoptera**, geographical distribution, habitat, France 9470.
- Coleoptera**, geographical distribution, new records, Sweden 3943.
- Coleoptera**, habitat, ecology, geographical distribution, forests, Sweden, Abisko 4424.
- Coleoptera**, keys, morphology, collections, Australia 4945.
- Coleoptera**, kin selection, evolutionary genetics, behavioral genetics, altruism 8670.
- Coleoptera**, Lomatium, pollination, host plants, flowering 6785.
- Coleoptera**, nesting behavior, host plants, *Clibadium microcephalum* 4396.
- Coleoptera**, new records, geographical distribution, Sweden 7089.
- Coleoptera**, new records, geographical distribution, Sweden 7094.
- Coleoptera**, new species, new records, West Indies 806.
- Coleoptera**, occurrence, geographical distribution, historical account, Sweden 3941.
- Coleoptera**, pathogens, life history, *Sporozoa* 5025.
- Coleoptera**, pest control, stored products, growth regulators 3787.
- Coleoptera**, pests, pest control, abundance, *Persea* fruits 1454.
- Coleoptera**, pests, stored products, toxicity, pesticides (organophosphorus) 7403.
- Coleoptera**, pollination, *Listera ovata*, Sweden 5204.
- Coleoptera**, population density, activity patterns, seasonal variations, India, West Bengal 5256.
- Coleoptera**, predators, Aphididae prey, India 4417.
- Coleoptera**, rare species, Netherlands, Voorne I. 6321.
- Coleoptera**, records, species composition, Finland 7897.
- Coleoptera**, respiration, elytra, functional morphology 6539.
- Coleoptera**, samplers, methodology 4918.

Coleoptera, (continued)

- soil fauna, indicator species, toxicity tests, ecosystem dynamics 5761.
soil fauna, population dynamics, seasonal variations, Czechoslovakia 7599
species composition, abundance, habitat, Malaysia 3950.
species composition, freshwater environments, species richness, macrophytes.
British Isles, Norfolk Breckland 6234.
species composition, new records, Bryopsis association, British Isles, Scotland.
Lurgie L. 5508
species diversity, abundance, seasonal variations, Grenada 7583
species identification, sex determination, methodology 1696.
7 species, toxicity, methyl bromide, phosphine 1073.
surveys, salt marshes, USA, Florida 3622.
synecology, community composition, dunes, Namibia, Namib Desert, Gobabeb 9205.
transmission, *Solanum nodiflorum* mottle virus 278.
wings venation, comparative studies, phylogeny 73.
- Coleotechnites**,
sampling methodology, infestation, Pinus jeffreyi 8559.
- Collas**,
melanism, absorption, solar radiation, diel activity 6536.
thermoregulation, thermoregulatory behavior, functional morphology, heat transfer 652.
- Collas alexandra**,
life cycle, diapause, larvae, environmental conditions 6707.
- Collas alexandria**,
life cycle, ecological distribution, diets, host plants, USA, Rocky Mts. 7517.
- Collas cesonia**,
phenotypes, morphology, occurrence, USA 7269.
- Collas crocea**,
occurrence, Sweden 4719.
- Collas eurytheme**,
courtship, mate selection, females 407.
diets, rearing, methodology 7250.
- Collas hyale**,
occurrence, Sweden 4719.
- Collas philodice**,
courtship, mate selection, females 407.
diets, rearing, methodology 7250.
- Collas philodice eriphye**,
host searching behavior, host plants, oviposition, host preferences 6682.
- Colladonus ciliatarius**
X disease vectors, factors affecting orchards colonization 6173.
- Colladonus montanus**,
X disease transmission, infectivity 4191.
- Collagenase**,
crystallization, structure, Hypoderma lineatum 8087.
- Collection**,
seeds, equipment, food sources, rearing, *Oncopeltus fasciatus* 8025
storage, survival, *Jalisco spinosus* 730.
- Collections**,
Academy of Natural Sciences, Collembola, USA, Pennsylvania 3136.
Dep. Taxon. Insect. Inst. Plant Protection Res., Staphylinidae, German Dem.
Rep., Eberswalde 6337.
directories, federal policy, public lands, Arthropoda, USA 4754.
environmental surveys, Invertebrata, Australia 8704.
environmental surveys, Invertebrata, Korea, Dem. People's Rep. 8679.
galls, host plants, Insecta, Sweden 3599.
Hungarian Natural History Museum, geographical distribution, phenology, Oligia.
Palaearctic Region 8674.
identification, Insecta 3960
identification, taxonomy, Insecta, Kenya 3175.
identification, taxonomy, status, Insecta, Malawi 3174
Miridae, British Isles, British Museum of Natural History 4753
morphology, keys, Coleoptera, Australia 4945
museums, Lepidoptera 7129
Natural History Museum of Geneva, species composition, Mantispinae.
Platymantispinae, Europe, Africa, South America, Malaysia 7883
new records, new species, Diplopoda, Iran 851
nomenclature, Aphididae, USA, Minnesota, University of Minnesota 7926
pollen, traps, and methodology, apiculture, Apis mellifera 1406
species composition, catalogues, Coleoptera, France, Pyrenees 9456
taxonomy, morphology, Lepismatidae 4065
taxonomy, morphology, Microcorypha 7242
taxonomy, morphology, Nemouridae 5608
terminology, acronyms, museums, World 7925
types, museums, Lepidoptera 7921
- Collemboles**,
abundance, community composition, soil properties effects on, India, West Bengal 5253.
abundance, habitat preferences, nests, Mammalia 1179
abundance, herbicides effects on, nontarget organisms, soil 5259
abundance, paddy fields 5261
aggregation, pasture, environmental factors, Brazil, Amazonia 4425
association, forest floor leaf litter, Tillandsia, Mexico 2167
cold tolerance adaptations, Antarctic 8102
cold tolerance, physiology, polar environments 979
collections, Academy of Natural Sciences, USA, Pennsylvania 3136
community composition, soil, India, West Bengal 5252
decomposition, leaf litter 2133
dorsal organ, embryogenesis 3401
energetics, activity, reproductive strategy 6843
food organisms, anti-predator behavior, *Notiphysa biguttatus* 498
food organisms, food preferences, Nictolietidae 496
habitat selection, community composition, leaves morphology 9207
nests entomofauna, *Micromys minutus* 460.
population dynamics, soil properties effects on 5254
population levels, environmental effects, land use, USSR, Kolkhida 7010
population levels, species composition, nests, Mammalia 570
prairies, detritus processing, USA, Wisconsin 2287
soil fauna community structure, population density, factors affecting, crop
fields, India, Varanasi 4443
soil fauna, effects on abundance, soil microorganisms 5266
soil fauna, indicator species, toxicity tests, ecosystem dynamics 5761
supercooling, cold hardness, Antarctic 3364
toxicity tests, soil pollution, indicator species 5047
- Colletes**,
biochemical analysis, Dufour's gland, secretion, volatiles, cells 244
- Colletes cunicularius**,
mating behavior, sex pheromone role 5101
- Colletes davisianus**,
habitat preferences, nesting, urban environment, walls, British Isles 1182
nesting behavior, burrowing behavior, dunes, Germany, Fed. Rep. 7804.
- Collops bipunctatus**,
food preferences 1197.
- Collops vittatus**,
food preferences 1197
males, attractants, caryophyllene 418.
- Colombia**,
apiculture, developmental programs 6206
Apis mellifera nests, pests occurrence, *Pseudohyocera kerteszi* 1315.
host preferences, predators, parasites, *Heliothis* 555
new species, taxonomy, morphology, *Hyalodocoris elongatus* 4849
new species, taxonomy, morphology, *Neosilba* 4702
new species, taxonomy, morphology, *Nephaspis namolica* 5560
population genetics, genetic load, *Drosophila willistoni* 9429
taxonomy, morphology, new genera, new species, *Edovum putleri* 2454.
- Colonial characteristics**,
activity patterns: nesting behavior, *Vespa consobrina* 6220
aggregation behavior, queens chemical stimuli effects on, *Myrmica rubra* 2267.
aggressive behavior, apiculture, *Apis mellifera* 3731
apiculture, queens size, aberrants, *Apis mellifera* 7731
body size, polymorphism, castes, *Solenopsis invicta* 2275
castes, geographical variations, *Cryptotermes brevis* 6999
castes, morphology, *Paratrigona subnuda* 6996
castes, reproduction, *Cataglyphis cursor* 7002
castes reproduction, ergatoids, *Nasutitermes corniger* 6998
castes, social behavior, *Lasiosiglossus zephyrum* 6216
castes, social behavior, *Lasiosiglossus zephyrum* 7003
comb construction, *Vespinae* 3842
communication, vibratory stimuli, *Vespa vulgaris*, *Vespa maculifrons* 4645.
defense mechanisms: Formicidae repellents, *Polistes fuscatus* 6984
defense mechanisms: sound production (biological), nests, *Synocera virginea* 3847
electric fields effects on, power lines, *Apis mellifera* 7570
factors affecting males abundance, *Myrmica* 2273
food sources, distribution, *Solenopsis invicta* 2274
foraging behavior, chemical communication, food sources, *Formica polyctena* 3841
foraging behavior, feeding behavior, *Camponotus vagus* 2271
foraging behavior, workers, fungus gardens, *Macrotermes mukaiensis* 2266
habitat selection, substrate preferences, fungi, *Acromyrmex landolti fracticornis* 6221
inbreeding effects on survival, *Apis mellifera* 1548
interspecific relationships, webs construction, *Dendromyrmex charifex*,
Dendromyrmex fabricei 2272
intraspecific relationships: aggression, castes, *Monomorium pharaonis* 3838
larvae feeding workers, *Bombus terrestris*, *Bombus terrestris* 749
life cycle, aggressive behavior: reproductive behavior, *Enophora bistriata* 473
males production, *Myrmica rubra* 2270
male selection, copulation, *Pogonomyrmex californicus* 8257.
mathematical models, *Myrmica* 3849
mating behavior, population genetics, *Lasius sakagami* 2276
mounds, architecture, *Odontotermes gurdaspurensis*, India, Haryana 7801
mounds, fungus gardens, *Odontotermes microdentatus* 5424
mounds, geomorphology, *Isopora* 3844
nest building, *Synocera surinama* 4643.
nesting behavior, division of labor, *Melipona favosa* 7005
nesting behavior, evolution, *Megachile rubri*, *Megachile texana* 6983
nesting behavior, life history, *Bombus ionocens* 6982
nesting behavior, movements, *Tapinoma sessile*, *Formica subsericea* 7004
nesting behavior, social behavior, *Xylocopa pubescens* 7007.
nesting behavior, swarming behavior, soil, *Isopora*, India 5426.
nesting behavior, workers, *Polistes chinensis antennalis* 2269.
nesting, population dynamics, *Vespa maculifrons* 6988
nests incompatibility, recognition pheromones, *Pseudomyrmex ferruginea* 7799.
nests, new records, geographical distribution, *Solenopsis invicta*, Puerto Rico 4642
nests, overwintering, *Vespa squamosa* 4644
nests, sex ratio, *Polistes exclamans* 3045
nutrients effects on feeding behavior, *Solenopsis invicta* 1991
parasites infection, apiculture, *Varroa jacobsoni*, *Apis mellifera* 5183.
phenotypes, selection, *Apis mellifera*, Canada, Alberta 9433
polymorphism, behavior, activity patterns, larvae, *Malacosoma americanum* 9359.
polymorphism, developmental stages, *Macrotermes mukaiensis* 435
population structure, workers, males, queens, *Bombus perplexus* 9366.
queens pheromones effects on castes, social behavior, *Apis mellifera* 3044.
queens, *Solenopsis invicta*, USA, Texas, Madison Co. 9365.
reproduction, castes, *Coptotermes* 6217
reproduction: castes, *Lasius sakagami* 7000
reproduction, castes, royal pair, *Macrotermes mukaiensis* 8591
reproductive strategy, *Nasutitermes corniger*, Panama 3845
sex ratio, population dynamics, *Apterostigma dentigerum* 3846
sex ratio, queens effects on, *Hymenopora* 3043
sex ratio, queens effects on, *Myrmica* 2279
social behavior, genetic relationship, measuring techniques, Insecta 7871.
social behavior: interspecific relationships, nuding behavior, *Chalepoxenus muellerianus* 6994
social behavior, queens, workers, *Apis mellifera* 3051.
social organization, activity patterns, *Mallos gregalis* 9354.
social organization, *Lasiosiglossus zephyrum* 5421
social structure, queens, *Leptothorax nyländeri* 4648
swarming behavior, queens pheromones effects on, *Apis mellifera* 746.
symbiosis, inoculation, *Termitomyces*, *Macrotermes* 2809
thallia, chemical communication, castes, *Apis mellifera* 6992.
workers, males, differentiation, *Scaptomyza postica* 7001.
workers mating behavior, queens effects on, *Lasiosiglossus zephyrum* 2268.
- Colonies**,
activity patterns, larvae, *Malacosoma americanum* 5142.
aggressive behavior, interspecific relationships, intraspecific relationships,
Formica lugubris, *Formica cunicularia* 5159.
apiculture, chemotherapy, parasites, drugs distribution, *Apis mellifera* 8570.
apiculture, infestation, *Varroa jacobsoni*, *Apis mellifera* 2975.
apiculture, mortality, pesticide applications, *Apis mellifera* 6937
apiculture, wood preservatives effects on, *Apis mellifera* 3019.
asphyxia tolerance, propolis effects on, *Apis mellifera* carnica 1413.

Colletes, (continued)

- Bacillus* larvae spores distribution, *Apis mellifera* 1016.
 bionomics, geographical distribution, *Serriotes serifer* 6989
 brood care, population density, seasonal variations, *Isoptera*, India 5418
 broods, sex ratio, *Euryaleus calceatus* 5422
 cleptoparasitism, foraging behavior, *Melipona rufiventris* flavolineata 6743.
 damage, parasites, *Varroa jacobsoni*, *Apis cerana* 4380
 damage, pests effects on, apiculture, *Apis mellifera*, *Viola edmandae* 1419.
 development, termitaria construction, *Odontotermes formosus* 2781.
 diel periodicity, metabolism, oxygen consumption, *Apis mellifera* 5417.
 dispersal, spatial distribution, *Formicidae*, Panama 4649.
 ecological distribution, habitat, *Phaeodora lamia*, USA, Texas 6986.
 effects on soil properties, *Trinervium murex* 6825
 electric currents effects on, power lines, *Apis mellifera* 1866
 feeding behavior, semiand environments, *Macrotermes michelesi*, Kenya 2004.
 food organisms, predation, *Megaponera foetens*, *Macrotermes* 2109
 food preferences, ools, *Solenopsis invicta* 1992
 food preferences, pollen, *Apis mellifera*, Canada, Alberta 2010
 foraging behavior, activity patterns, males, *Plebeia drynaria* 9362.
 foraging behavior, competition, spatial distribution, *Pogonomyrmex badius* 2006.
 foraging behavior, seasonal variations, nectar, pollen, *Apis mellifera* 5320
 geographical distribution, ecological distribution, *Solenopsis*, USA, Texas 6995.
 infestation, parasites, *Varroa jacobsoni*, *Apis mellifera*, Brazil 4456.
 management, apiculture, *Apis mellifera*, 1433
 metabolism, energetics, oxygen consumption, *Apis mellifera* 4641
 mortality, *Chalcidomys murina*, Poland 9363
 mortality, chalkbrood disease, *Apis mellifera* 1803
 mortality, larvae, *Spharxipariparis*, Japan 2165
 nest building, *Apicotes mami* 5420
 nest building (non-reproductive), vegetation, *Myrmica sabuleti*, *Myrmica*
scabrinodis, British Isles, England 8588
 nest building, social behavior, *Retulitermes lucifugus* 4650
 nesting behavior, interspecific relationships, mutualism, *Melipona flavipennis*,
Melipona fasciata 6985
 nesting behavior, site selection, flight activity, *Vespa consobrina* 9357
 nests development, *Vespa maculifrons*, *Vespa germanica*, *Vespa vulgaris*,
Vespa vidua 8592
 new records, geographical distribution, *Trigona*, South Africa 2372
 overwintering, morphology, castes, *Vespa squamosa* 4644
 parasites, effects on survival, reproduction, *Mastotriella crustosa*, *Nasutitermes*
coniger, *Nasutitermes ephrae* 4193
 parasites, oviposition, *Pithyrus vestalis*, *Bombus terrestris* 4376
 population density, food availability, effects on brood rearing, *Apis mellifera*
8233
 population dynamics, *Myrmica sabuleti*, *Myrmica scabrinodis*, British Isles,
England 6218
 population dynamics, stability, mathematical models, *Myrmica himalaica jacobsoni*
8380.
 population genetics, models, polymorphism, sex ratio, *Formicidae* 3923.
 population levels, emergence, effects on, predatory behavior, *Polistes chinensis*
antennulas 2788.
 population regulation, cannibalism, queens, *Myrmica* 1479.
 population studies, grasslands, *Myrmica sabuleti*, *Myrmica scabrinodis*, British
Isles, England 8587.
 predation, *Indomyrmex purpureus*, *Oryzopsis genoveva* 5244.
 queens, *Apis texana*, USA, Louisiana 3046.
 queens, broods, effects on thermoregulation, metabolism, *Apis mellifera* 8590
 rearing methodology, *Lasio glossus zephyrum* 4923
 reproduction, diflubenzuron effects on, *Apis mellifera* 6622
 reproduction, polygyny, monogyny, *Myrmica ruginodis*, Japan, Sapporo 3843.
 resource partitioning, foraging behavior, *Pogonomyrmex owybeci*, USA, Idaho 5915.
 sampling methodology, *Eciton burckelii* 5613.
 sex ratio, life cycle, temperature effects on, *Euryaleus calceatus* 5078.
 size, survival, mortality factors, eggs, larvae, *Neodiprion serifer* 1270.
 social behavior, dominance, castes, *Bombus terrestris* 5419
 social behavior, imprinting, attachment, queens, *Vespa orientalis* 745.
 social behavior, sanitation, excretory products distribution, *Mallos gregalis*
2143.
 social behavior, toxicants effects on, *Solenopsis invicta* 1942
 structure, nest building, *Parischogaster mellyi* 2278
 survival, population dynamics, *Pogonomyrmex occidentalis*, USA, Nebraska 6987.
 survival, reproduction, food availability effects on, *Coptotermes formosus*
4646.
 toxicity, diflubenzuron, nontarget organisms, *Apis mellifera* 3466.
 workers eggs laying, *Bombus terrestris* 469.
- Colonization,**
 artificial substrates, pollution effects, water pollution, *Hygrobatas fluviatilis*
1920.
 benthos, *Chamaetypus psyllae*, *Potamia flava*, *Hydropsyche*, USA, Mississippi R. 6226.
 carrion location, foraging behavior, *Nicrophorus carolinus* 5924
 crops, population levels, *Aphididae* 2891.
 environmental conditions, forests, soil properties, *Femica yessensis*, Korea,
Rep., Gyeongang-Nam-Do 4438.
 freshwater environments, flight activity, dispersal, *Insecta* 6230
 geographical distribution, population genetics, *Drosophila subobscura*, Chile
1578.
 habitat, dispersal, flight activity, *Triphaba virgata*, *Triphaba borealis* 8360.
 habitat, trees, drilled holes, species composition, *Insecta* 2284.
 habitat, vegetation, *Potamogeton*, *Sparganium*, *Simulium penobscotensis*, USA, Maine.
Penobscot R. 755.
 host plants, aggregation, sex pheromone biosynthesis, *Ips paraconfusus* 3539.
 host plants, effects on weeds, *Myzus persicae* 333
 host selection, pheromones, kairomones, allomones, reviews, *Scolyidae* 6684.
 light effects, crop protection barriers, behavior, *Myzus persicae* 1172.
 littoral zone, water reservoirs, *Formicidae*, Australia 9174.
 orchards, X disease vectors, *Cicadellidae* 6173.
 pest control, feeding behavior, *Coccinella septempunctata*, *Monella caryella*,
Modiolopsis nigropunctata, *Melanocallis caryaeifolia* 694
 plantations, *Coniferales*, *Glossina pallidipes*, *Trypanosoma*, Africa 1267.
 queens, biochemical characteristics, *Solenopsis invicta* 5716.
 queens, foundresses, egg laying, dominance, *Polistes fuscatus* 1893.
 rearing, culture systems, vectors, *Oeciacus vicarius* 3692
 reproduction, queens, *Polistes metricus* 2129.

Colletes,

morphology, genitalia, Australasian Region 8052.

Color,

- discrimination learning, *Hymenoptera* 5121.
 dominance, green, nymphs, *Leptoglossus corculis* 1789
 environmental factors, larvae, *Ephestia kuehniella* 7350.
 eye, morphology, genetic factors, *Ploidy interuptencia*, *Ephestia elutella* 3905.
 eye, mutants, mating behavior, *Drosophila melanogaster* 1135.
 eye, mutation, *Apis mellifera* 1524
 eye, mutation, genetic control failure, *Lucilia cupina* 2348.
 eyes, mutants, heritability, *Culex pipiens pallens* 4685
 flowers, host plants, pollinators effects on, *Hyles lineata*, *Aquilegia scutellaria*
2834.
 flowers, pollinators feeding behavior effects on, *Delphinium nelsonii* 1291.
 flowers, visual discrimination learning, cross-pollination, *Apis mellifera* 9083
 reproductive organs, taxonomy, new species, *Bourletella gibbosa*, USA, South Carolina
1620
 orientation, visual perception, *Trialeurodes vaporariorum* 8265.
 pheromone traps, effects on efficacy, *Podosia syringae* 2248.
 photoperiod, effects on dimorphism, rearing, *Thyanta calceata* 5092.
 polymorphism, clines, population genetics, *Phaulacridium vittatum* 2344.
 potentiation, overshadowing, odor, *Apis mellifera* 5874.
 reproductive organs secretions, age effects, mating, *Spodoptera littoralis* 2707.
 visual discrimination, *Apis mellifera* 3301.
 visual discrimination, brightness, light intensity, achromatic vision, *Apis*
mellifera carnea 4973.
 visual discrimination learning, *Apis mellifera* andersoni, *Melipona quadrifasciata*
antithiodides, *Melipona rufiventris* 5123.
 visual discrimination, light intensity, brightness discrimination learning,
achromatic vision, *Apis mellifera carnea* 4974
 visual stimuli, traps, efficacy, pest control, *Liriomyza sativae*, *Liriomyza*

Coloradia veldi,

new species, taxonomy, morphology, USA, California, San Bernardino Mts. 6447.

Colorado tick fever,

disease reservoirs, vectors, *Dermacentor andersoni*, USA 637.

Colorado tick fever virus,

disease transmission, vectors, *Dermacentor andersoni* 3655.

Coloration,

- abdomen, wings, males, *Megapodagrionidae*, *Chlorocyphidae* 3362.
 aggressive behavior, mimicry, *Saitis piscularis*, 5150.
 causes, colonial characteristics, *Paratrigona subnuda* 6996.
 characterization, mutants, *Bombus mori* 9417.
 defensive behavior, activity patterns, *Sipylodes sipylus* 6733.
 environmental factors, external stimuli, pupae, *Papilio protenor demetrius* 2602.
 food organisms, predation effects on, *Acani*, *Pisces* 6228.
 geographical variations, *Charadra ingenua* 2510.
 hosts, host searching behavior effects on, *Diptera*, *Equus zebra* 2130.
 hybridization, *Chrysocarus*, *Chrysotricha* 7051.
 inheritance, genetic factors, *Myzus persicae* 5478.
 melanism, population studies, *Biston cognataria*, USA, Pennsylvania 7579.
 melanization, hormones, *Leucania separata* 3360.
 mimicry, predation, *Parus major*, *Lycaeus equestris* 9214.
 morphology, aberrants, *Chlosyne lacinia*, USA, Texas 8042.
 morphology, identification, eggs, *Rhodnius* 4099.
 morphology, keys, larvae, *Hydropsyche* 7266.
 mutants, competition, wild type, *Pectinophora gossypiella* 8364.
 mutants, larvae, *Lymantria dispar*, Japan, Honshu 7047.
 new species, sexual dimorphism, *Automeris louisiana*, USA, Louisiana 7228.
 phylogeny, *Saundersia oleae*, Israel 9178.
 photoperiod, *Lyoneeta clerella* 2773.
 pigments migrations, role, ATP pyrophosphatase, *Carassius morosus* 3363.
 polymorphism, *Euphydryas aurinia* trillensis, *Melitaea trivia ventorillensis*,
Spain 6501.
 polymorphism, genetic factors, *Araneus diadematus*, *Araneus marmoreus* 7064
 polymorphism, population genetics, *Adiantum vulgare* 2342.
 polymorphism, population genetics, *Euroleptus ovata*, Europe 4473.
 polymorphism, *Synanthedon tipuliformis* 5647.
 polymorphism, vertical distribution, altitudes, *Elaphus americanus*, North
America, Pacific Northwest 9217.
 population studies, environmental conditions, human impact, *Aphantopus*
hyperantus, Finland 9186.
 population studies, hemolymph protein composition, *Philaenus spumarius* 8945.
 role, molting hormones, developmental stages, *Sarcophaga bullata* 3361.
 role, thermoregulation, *Brachystola magna* 4171.
 taxonomy, status, *Catocala* 7227.
 temperature effects on, integument, *Aphidius smithi* 7349
 variability, population studies, *Aphantopus hyperantus*, Finland 2104.
 wings, morphology, classification, *Trimerotropis sparsa*, USA, Nebraska 8890.

Colotrechus agromyzus,

new species, morphology, geographical distribution, Asia 35.

Colpocephalus heterosoma,

parasites, morphology, biometrics, new records, *Phoenicoproctus ruber*, Spain 8336.

Colpoveila,

new genera, Australia, Northern Territory 3208.

Colymbetes,

evolution, phylogeny, taxonomy 5504.

Coma,

temperature effects, cold acclimation, *Cryptolestes ferrugineus*, *Oryzaephilus*
surinamensis, *Rhyzopertha dominica*, *Tribolium castaneum* 3369

Comanichelus,

mutualism, gut microflora, cellulose digestion 8308.

Comb,

construction, colonial characteristics, *Vespinidae* 3842.
 construction effects on honey yield, apiculture, *Apis mellifera* 3775.
 construction, sheltering behavior, *Hymenoptera* 1477

Combs,

orientation, apiculture, *Apis mellifera* 5319.
 surface area, honey boarding behavior, *Apis mellifera* 8585.
 wax, strength, apiculture, *Apis mellifera* 5317.

Commensalism,

gut microflora, effects on, nitrogen metabolism, *Nasutitermes exitiosus*,
Coptotermes lacteus 233

Commensals,

Smitium culicetiae, *Anopheles hillii* 1008

Commensals,

aquatic organisms, lakes, *Protozoa*, *Insecta*, India 7022.

Communication,

antennae, trophallaxis, information theory, *Myrmica rubra* 5870.

Communication, (continued)

- colony characteristics, vibratory stimuli, *Vespa vulgaris*, *Vespa*
maculifrons 4645
 disruption, synthetic sex pheromone effects on, *Grapholita molesta* 415
 leaves vibrations, *Cupressus salei* 3542
 magnetic fields receptors, *Apis mellifera* 3302
 natural selection, *Scotolyda* 4699
 social behavior, alarm behavior, defensive behavior, nests, *Syneca surinama*
 4305
 sound production, stridulation, acoustics, *Corixidae* 8615
 vibratory stimuli, surface water, aquatic animals, reviews, *Gerridae* 5868
- Communication systems**
 evolution, effects on size distribution, *Halictidae*, *Apidae* 748
- Community composition**
 abundance, crop fields, *Leguminosae*, *Insecta* 6901
 abundance, emergence, phenology, *Chironomidae*, Canada, Alberta, Bigoray R. 752
 abundance, forests, *Isoptera*, *Nigra* 4460
 abundance, grasslands management effects on, *Arthropoda* 5234
 abundance, islands lakes, USA, Georgia, *Crangonyx gracilis*, *Paspalum fluitans*
 2293
 abundance, soil properties effects on, *Collembola*, India, West Bengal 5253
 abundance, soil properties effects on, *Oribatida*, India, West Bengal 5250
 altitude gradients, Araneae, Norway 4477
 association analysis, plants, *Insecta*, *Xanthocephalus sarthrae*, *Xanthocephalus*
microcephala 2064
 benthos, colonization, artificial substrates, *Hydropsyche*, USA, Mississippi R.
 6226
 benthos, colonization, *Cheumatopsyche*, *Potamia flava*, *Hydropsyche*, USA,
 Mississippi R. 6226
 benthos, *Ephemeroptera*, *Diptera*, Venezuela, Valencia L. 621
 caves, surveys, *Invertebrata*, Barbados, Coles Cave 5439
 clear cutting effects on, forests, Araneae, USA, Appalachian Mts. 6042
 crop fields, vegetation patterns effects on, *Insecta* 2888
 dunes, *Coleoptera*, Namibia, Namib Desert, Gobabeb 9205
 ecological distribution, Acari, Netherlands, Maarsseveen I. 5433
 ecological distribution, biogeography, *Acrididae*, China, People's Rep. 4450
 environmental factors, soil fauna, forests, Acari, India, Kashmir 7009
 environmental impact, power lines, chaparral, *Arthropoda*, USA, Arizona 9183
 eutrophication, acidity, *Chironomidae*, New Zealand, Opal L. 1485
 food sources, availability, *Bombus*, Finland 4476
 forests, canopies, *Arthropoda*, USA, North Carolina 2144
 forests, leaf litter, *Uropodidae*, Romania 6006
 forests, predators effects on, *Arthropoda*, *Myrmotherula fulviventris* 4467
 forests, stability, Carabidae, France 6824
 forests, vegetation patterns, succession, Araneae 9180
 geographical distribution, environmental effects, habitat, *Odonata*, Lesser
 Antilles 1569
 Glycine max crop fields, abundance, *Arthropoda* 2164
 grasslands, effects on, *Acrididae*, USSR, Kazakhstan 589
 habitat, abundance, *Parcoblatta* 6845
 herbivores, interspecific relationships, algae, *Diptera*, USA, California 3858
 herbivores, leaf litter, *Insecta* 9187
 insects, salt marshes, herbivores, nutrient enrichment, *Spartina* 2290
 leaf litter, seasonal variations, environmental factor, Brazil, Restinga de
 Marica 5219
 leaves morphology effects on, *Collembola* 9207
 Lecanium scabrum host plants, *Mycetophilidae* 4439
 life history, *Insecta*, USA, Arizona, *Synamore Creek* 3870
 migrations, swarms, *Pteris rapae*, *Pteris*, *Nassua cardui*, *Syrphus*, Poland
 Coast 5212
 occurrence, *Opetidae*, *Platyzeidae*, Czechoslovakia 2358
 paleoecology, swamps, Upper Carboniferous, *Insecta*, USA, Pennsylvania 2376
 paleoenvironments, paleoclimatology, *Insecta*, Norway 4750
 parasitism, age effects, *Picus taeda*, *Rhyacionia frustana* 1229
 parasitism, interspecific relationships, *Indomymex humilis*, *Planococcus citri*,
Saussetia oleae, France 3612
 parasitoids, effects on hosts extinction, *Xanthoteras politum*, USA, New Jersey
 2034
 pests, crop fields, *Coleoptera*, Finland 5299
 pests, stored products, *Manihot esculenta*, Malaysia 5386
 pollution effects, insecticides, streams, *Insecta* 5437
 pollution effects, water pollution, colonization, *Hygrobatas fluvialis* 1939
 pollution effects, water pollution, streams, *Chironomidae*, Belgium, Antwerp 7810
 population density, vegetation patterns, *Coccinellidae* 9191
 population dynamics, abundance, forests soil, Acari 6000
 reclaimed land, mines, plant communities, *Arthropoda* 6048
 recolonization, salt marshes, islands, biogeography, *Arthropoda*, USA, Florida
 Coast 5264
 seasonal variations, *Tribolium confusum*, *Strophus oryzae*, *Ephestia kuehniella*,
Rhyzopertha dominica, Japan 3640
 shade effects on, *Insecta*, New Zealand, Waitakeri R. 6229
 soil, *Collembola*, India, West Bengal 5252
 soil fauna, *Arthropoda*, Japan 8660
 soil fauna, orchards, *Arthropoda* 7008
 soil, insecticides effects on, *Arthropoda*, USA, California 2149
 soil, insecticides effects on, nontarget organisms 5260
 spatial distribution, burrows, *Citellophilus tesquorum sungaris*, *Neopaylla*
bidentuliformis, China, People's Rep. 2895
 species diversity, abundance, *Arthropoda*, Grenada 7583
 species diversity, *Diptera*, *Crozet* Is. 6828
 species diversity, *Formicidae*, USA, South Carolina 1269
 streams, pollution effects, diflubenzuron, *Insecta* 7024
 streams, pollution effects, diflubenzuron, toxicity testing, *Insecta* 9370
 streams, pollution effects, temephos, *Insecta* 7021
 succession, association, *Heliconia*, *Insecta* 5951
 succession, carrion, *Insecta*, Costa Rica 5166
 succession, construction disturbance effects on, vegetation patterns, *Arthropoda*
 1284
 succession, developmental stages, lakes, *Coleoptera*, Sweden 3857
 succession, fires, recovery, chaparral, *Insecta*, USA, California 5246
 succession, *Staphylinidae*, USSR, Ukraine, Carpathian Mts. 6867
 surveys, crop fields, Araneae, *Ophiolones*, Sweden 4459
 trophic status, seasonal variations, annual variations, *Syrphidae*, British Isles
 5617
 water management effects on, *Culicidae*, Czechoslovakia, Moravia 7016

Community structure

- Acanthia auranti* pest control effects on, *Formicidae* 2879
 coevolution, host plants, *Cruciferae*, *Anthocharis cardamines* 8348
 comparison, herbivores, reviews, *Insecta* 593
 competition, niche partitioning, *Bombus*, USA, Colorado 4469
 core species, satellite species, abundance, distribution, species richness,
Formicidae 8377
 forests, infestation effects on, *Dendroctonus frontalis* 3600
 forests, seeds dispersal, *Formicidae* 3602
 forests, succession, plant communities, *Arthropoda*, USA, Arizona 6854
 host plants, flowering phenology, pollination, *Bombus* 1258
 soil fauna, Acari, *Collembola*, crop fields, India, Varanasi 4443
 soil fauna, *Cryptogamidae*, vegetation effects on, India, West Bengal,
 Santmikan 4442
 species composition, benthos, lakes, *Chironomidae*, New Zealand 7817
 species composition, *Bombus*, Europe, North 6830
 species composition, habitat, USA, Ohio, Grand R., *Odonata* 3854
 species composition, *Malus orchard*, *Coccinellidae* 9190
 stands, defoliation effects on, *Orgyia pseudotsugata*, *Coniferes*, USA, Idaho
 9601
 streams, pollution effects, sewage effluents, *Insecta*, USA, Virginia 7814
- Compaction**
 inhibition, hydroxymethylglutaryl-CoA reductase (NADPH), protein biosynthesis,
 juvenile hormones, *Manduca sexta* 6558
- Compartmentation**
 abdomen segments, *Drosophila melanogaster* 921
 differentiation, wing discs, *Drosophila* 1084
 mutation, patterns duplication, mitosis recombination, *Drosophila* 1522
- Compatibilty**
 cytoplasm, eggs, development, strains, *Aedes polynesiensis* 1542
- Comperella bifasciata**
 methadation, toxicity 9020
- Competition**
 aggregation pheromone, lincetion, *Trypandendron lineatum*, *Onathotrichus retusus*,
Onathotrichus sulcatus 1776
 Cameraria, population regulation, host plants, *Quercus nigra* 2134
 cells, growth, wing discs, *Drosophila* 3468
 coexistence, effects on, body size, caves, *Pseudonophthalmus menetriesi*,
Pseudonophthalmus pubescens 1488
 coexistence, niche overlap, *Hispidae* 8366
 community structure, niche partitioning, *Bombus*, USA, Colorado 4469
 population, mounting behavior, *Lygaeus equestris* 3535
 defensive behavior, *Apoccephalus parastes* effects on, *Pheidole dentata*,
Solenopsis texana 3576
 displacement, nests, *Camponotus laevigatus*, *Formica haemorrhoidalis* 6855
 effects on population dynamics, *Stenomatus calcitrans* 2148
 effects on population dynamics, *Stenomatus calcitrans* 7606
 effects on workers egg laying, *Bombus terrestris* 469
 feeding behavior, *Trigona*, *Phaethon superciliosus*, Costa Rica 3571
 feeding, *Formicidae*, Turkey 6744
 feeding, substrate preferences, *Aphis fabae*, *Acyrtosiphon pisum* 5925
 females, mating behavior, courtship, *Anabrus simplex* 3532
 fertility, diapause, males, *Anthrenus grandis grandis* 2677
 food sources, forests, clear cutting effects on, *Carabus lunatus*, *Carabus*
silvaceus 8367
 food sources, interspecific relationships, *Phyllotreta striolata*, *Phyllotreta*
cruciferae, *Pteris rapae* 6829
 food sources, larvae, effects on life history, *Musca autumnalis* 1274
 foraging behavior, niche overlap, *Indomymex prunosus*, *Myrmecocystus mimicus*,
Myrmecocystus depilis 5999
 foraging behavior, *Phaethon*, *Trigona ferricula*, Panama 4409
 growth, seeds, predation effects on, *Gastrophysa viridula*, *Rumex crispus*, *Rumex*
obtusilobus 6784
 herbivores, community structure comparison, reviews, *Insecta* 593
 host plants, oviposition deterrents, pheromones, *Hylemya* 5856
 insects, *Popillia japonica*, interspecific relationships, population density 2862
 interference, soil-dropping behavior, *Tetramorium caespitum*, *Noma melanoder*
 5891
 interspecific, *Eledodes obscurus*, USA, New Mexico 2157
 interspecific relationships, effects on mate selection, females, *Chauliognathus*
peninsularis 1142
 interspecific relationships, herbivores, mortality, *Notostira elongata*,
Megalocera recticornis 3631
 interspecific relationships, parasitoids, *Heliothis virescens* 2811
 interspecific relationships, *Scaphobius*, *Popillia japonica*, USA, North Carolina
 6801
 intraspecific relationships, food, growth regulators, larvae, *Aedes aegypti* 3618
 larvae, substrate preferences, dispersion, *Chironomidae*, USA, Michigan, Hunt
 Creek 3288
 males, adaptations, morphology, competitive behavior, *Podischnus ager* 4423
 males, sterile-release, population dynamics, mathematical models 6077
 mating behavior, *Calopteryx discipulus* 1911
 mating behavior, chemotaxis, males, genetics, *Anopheles culicifacies*
 1902
 mating behavior, radiation effects on, males, *Culex tarsalis* 1125
 mating, sterilized organisms, *Ephestia kuehniella* 8232
 mortality, *Callosobruchus maculatus*, *Callosobruchus chinensis* 5231
 natural enemies, biological control, *Homoptera*, *Lepidoptera*, *Coleoptera* 6095
 oviposition, host plants population density, *Aphytis melinus*, *Aphytis*
lingnanensis 2166
 parasites, abundance, *Copidosoma koehleri*, *Apanteles subandinus*, South Africa
 2122
 parasites, hosts, *Lymantria dispar*, *Apanteles melanoscelsus*, *Rogas lymantriae*
 7545
 parasites, interspecific relationships, *Chrysomelidae*, *Heliconia*, Costa Rica
 4370
 parasites, population density, oviposition, host selection, *Biostes*
longicauda 2028
 parasites, *Trichogramma brevicapillum*, *Trichogramma pretiosum* 7424
 parasitoids, association, *Phyacionia frustana* 9140
 parasitoids, *Lepidoptera* hosts, *Diptera*, *Hymenoptera* 1224
 parasitoids, *Lepidoptera* hosts, *Hymenoptera*, *Diptera* 1225
 parasitoids, population density effects on host searching behavior, *Venturia*
canescens 3652
 pollination, *Centaurea scabiosa*, *Centaurea nigra*, *Insecta* 7552
 pollinators, flowering, *Centaurea scabiosa*, *Centaurea nigra* 6802

Competition, (continued)

- pollinators, food sources, food availability, Bombidae 6822.
 pollinators, nectar, population density, niche overlap, Bombus 2059.
 pollinators, nectar production, *Centaurea scabiosa*, *Centaurea nigra* 6803.
 population dynamics, mortality, larvae, *Danaus plexippus*, *Danaus chrysippus* 7610.
 population dynamics, resource partitioning, pools, *Arctocampa carinata*.
Calliconcha producta 6004.
 population dynamics, stored products pests, *Sitophilus oryzae*, *Trogoderma granarium*, *Tribolium castaneum* 5330.
 population growth, production, *Sitophilus oryzae*, *Sitophilus granarius* 7595.
 reproductive isolation, strains, population density, *Drosophila melanogaster* 1545.
 sexual reproduction, enzymes alleles, seminal fluid, *Drosophila melanogaster* 2731.
 sexual reproduction, parasites, *Aponomma hydrosauri*, *Amblyomma albolimbatum*, *Amblyomma limbatum* 5939.
 spatial distribution, foraging behavior, colonies, *Pogonomyrmex badius* 2006.
 sterile-release, sexual reproduction, males, *Anthonomus grandis* 8541.
 sterilization, *Anthonomus grandis* 9053.
 sympatric populations, effects on extinction, *Pennis oleracea*, *Pennis rapae*, USA 1286.
 wild type, mutants, fitness, *Pectinophora gossypiella* 8364.
Competitive behavior,
 morphology, adaptations, males, competition, *Podischnus agenor* 4423.
 social behavior, conferences, Insecta 1583.
Competitiveness,
 male sterility, statistical Analysis, variance, Insecta 2480.
Complement fixation,
 tests identification, blood meals, *Glossina morsitans* 2011.
Complex,
 purification, HnRNA, *Drosophila melanogaster* 2308.
 species, identification, electrophoresis, morphology, *Xestia* 68.
Complexionermis,
 parasites, *Anthracera pemyi*, China, People's Rep., Liaoning Province 6007.
Components,
 fitness, environmental effects, *Phaselus vulgans* 770.
 sex pheromone, effects on males flight activity, *Trichoplusia ni* 419.
 sex pheromone, attractancy, *Heliothis zea* 3540.
 sex pheromone, effects on males flight, *Spodoptera litura* 1160.
 sex pheromone, mating behavior disruption, biological control, *Heliothis virescens* 3763.
 synthetic, sex pheromone attractancy disruption, *Choristoneura fumiferana* 2756.
Compositae,
 isoenzymes, biochemical analysis, peptide mapping, *Drosophila melanogaster* 4670.
 species, symbionts, man, *Sarcophagidae* 9259.
Composts,
 mushrooms cultivation, pests population growth, *Lyconella mali* 6172.
Compound eyes,
 anatomy, histology, pigments, *Anomala rufocuprea* 7301.
 cornea, ultrastructure, optical properties, *Apis mellifera* 144.
 development, morphology, *Periplaneta americana* 3296.
 effects on flight activity orientation, timing 150.
 electroretinograms, wavelength sensitivity, bioluminescence, *Photuris versicolor* 2540.
 light effects, pigments, migrations, *Myndus crabus* 3297.
 light sensitivity, light traps, *Spodoptera exigua*, *Spodoptera frugiperda* 911.
 mutants, locomotor activity, circadian rhythms, *Drosophila melanogaster* 3304.
 ommatidia, growth, development, *Blattodea* 141.
 optical properties, *Scarabaeidae* 134.
 photoperiods, effects on locomotor activity, running, circadian rhythms, *Periplaneta americana* 918.
 photoreceptors, electrical properties, *Locusta migratoria* 3293.
 photoreceptors, phototaxis, *Drosophila* 2539.
 receptors, *Myrmica gulosa*, Australia 137.
 removal, effects on flight activity orientation, *Acrididae* 149.
 ultrastructure, comparative studies, *Cechenena*, *Cephonodes*, *Macroglossum* 7294.
 vision, migrations, pigments, light intensity, Insecta 4139.
 visual perception, light intensity, electrophysiological recording, *Lepidoptera* 7305.
 visual stimuli, optomotor response, flight activity, *Apis mellifera* 4981.
Compellura concinabata,
 parasitoids, habitat preferences, biological control, *Lymantria dispar* 8331.
Compsoecerus,
 taxonomic revision, morphology, Brazil 6364.
Compsoecerus deceptor,
 new species, taxonomy, morphology, Brazil 6364.
Compteromesa,
 new genera, morphology, taxonomy, USA, South Carolina 3194.
Compteromesa oconensis,
 new species, taxonomy, morphology, USA, South Carolina 3194.
Computer applications,
 activity patterns, measuring techniques, data acquisition, data processing, microcomputers 4914.
 pest control management, control programs, microprocessor software system 8564.
 song, acoustic communication, *Cystosoma saundersii* 1159.
Computer programs,
 classification, taxonomy, *Arthropoda* 1586.
 modeling, pest control, Insecta 3016.
Computers,
 data banks, systematics, *Arthropoda* 4759.
 mapping, epidemiology, disease control, onchocerciasis, Africa, Volta R. Basin 6068.
Conchaepitidae,
 taxonomy, morphology 2437.
Concinella septumpunctata,
 pest control, insecticides, crop fields 7743.
Concroe capensis,
 morphology, Africa, South 4900.
Concroe hessei,
 synonymy, taxonomic revision, *Concroe capensis*, Africa, South 4900.
Concroe parva,
 new species, taxonomy, morphology, Africa, South 4900.
Concroe walkeri,
 morphology, Africa, South 4900.
Conditioned reinforcement,
 potentiation, overshadowing, odor, color, *Apis mellifera* 5874.
Conditioned response,
 olfactory stimuli, amines effects on, brain, *Apis mellifera* 6687.
Conditioning,
 phenotypes, central excitatory state, hybrids, genetics, *Phormia regina* 6277.
 recognition, flower-guides, stamens, *Bombidae* 7501.
 visual perception, visual preferences, *Acheta domesticus* 7500.
Condiostylus ornaticauda,
 males, hypopygium circumverum anatomy 9035.
Cones,
 association, species composition, Insecta, *Picea abies*, Poland 9201.
 damage, peas, *Abies alba*, *Eaomyia* impossible, *Eaomyia grusia*, Romania 6920.
Conoecia,
 taxonomic revision, nomenclature, types 7990.
Conferences,
 African trypanosomiasis epidemiology, Africa 1334.
 biological control, pathogens, *Culicidae* 7128.
 biology, control programs, pests, *Athergona soccata* 4496.
 biology, taxonomy, Insecta, South Africa, Pretoria 5542.
 competitive behavior, social behavior, Insecta 1583.
 crop protection, chemical control, pest control, Insecta 3954.
 diapause, physiology, metabolism, hormones, Insecta 3959.
 horticulture, environment management, pest control, Insecta 3958.
Lepidoptera 4049.
 pest control, environment management, developing countries, Insecta 3957.
 pests, population dynamics, natural enemies, Insecta 8672.
 soil *Arthropoda* 5541.
 toxins, purification, characterization, envenomation, toxicity, man 8706.
Conformation,
 melittin, pH effects on, C.D., venom, *Apis mellifera* 4206.
Congo,
 interspecific relationships, parasites, associations, *Phenacoccus manihoti* 1222.
Congo, People's Rep.,
 flight range, capture-recapture studies, vectors, African trypanosomiasis, *Glossina fuscipes* quanzensis 4490.
 morphology, predators, *Coccinellidae*, *Exochomus flaviventris*, *Exochomus concavus*, *Huperaspis senegalensis* 4104.
 new species, taxonomy, morphology, *Derovatellus onorei* 7163.
 pest control, insecticides, decamethrin, traps, *Glossina fuscipes* quanzensis, *Glossina palpalis palpalis* 4547.
 pest control, traps, efficacy, *Glossina fuscipes* quanzensis 9262.
 trypanosomiasis, disease transmission, control programs, trapping, *Glossina* 9244.
 trypanosomiasis, disease transmission, epidemiology, *Glossina fuscipes* fuscipes 9243.
Conidia,
Beauveria bassiana, pathogens, production methodology, biological control, *Leptinotarsa decemlineata* 1404.
 discharges, larvae infection, Entomophthora, *Manestria brassicae* 3410.
 infection, pathology, *Beauveria bassiana*, *Heliothis zea* 5028.
Conidiobolus obscurus,
 pathogens, *Acyrtosiphon pisum*, *Stibion avenae* 2621.
 pathogens, infection, factors affecting sporulation, *Acyrtosiphon kondoi* 2646.
Conidiobolus thromboides,
 pathogens, infection, *Lymantria dispar* 5741.
Coniferales,
 mortality, infestation, Insecta, USA, Colorado 7551.
 parasitism, drought effects on, Insecta, USA, California 4394.
 plantations, colonization, *Glossina pallidipes*, Africa 1267.
 plantations, occurrence, survival, *Magica* 6161.
 stands, defoliation effects on, *Orgyia pseudotsugata*, USA, Idaho 3601.
Coniophora olivacea,
 decay fungi, effects on softwoods, food preferences, *Coptotermes acinaciformis* 1190.
Coniopterygidae,
 new records, geographical distribution, Sri Lanka 4901.
 taxonomy, morphology, new species, 6 species, North America 845.
 taxonomy, systematics 1664.
Coniopteryx,
 classification, systematics, check lists, species 2468.
 reviews, taxonomy, classification 4902.
Coniopteryx cyclonica,
 new species, taxonomy, morphology, Sri Lanka 4901.
Coniopteryx delta,
 new species, taxonomy, morphology, North America 845.
Coniopteryx ebenpeterseni,
 life cycle, activity patterns, predation, *Tetranychus* 6847.
 predation, pests, *Panonychus ulmi*, *Tetranychus urticae*, Italy 2813.
Coniopteryx latistylus,
 new species, taxonomy, morphology, Sri Lanka 4901.
Conistra rubiginosa,
 occurrence, British Isles 9445.
Conium maculatum,
 toxicity, herbivores, *Hyadaphis foeniculi*, *Euscelidius variagius*, *Papilio zalicana*, USA, California 8353.
Conocephalus dorsalis beybienkoi,
 new subspecies, taxonomy, morphology, USSR, Russia, Khabarovsk Region 7239.
Conoderus,
 pests, population levels, *Saccharum officinale* crop fields, Brazil, Sao Paulo 6098.
Conomyrma insana,
 community composition, habitat comparison, USA, South Carolina 1269.
Conopia myopaeformis,
 population levels, flight activity, pheromone traps 6953.
 populations, monitoring, pheromone traps, Italy 2889.
Conophorus coniperda,
 chemical control, pest control, *Pinus strobus*, USA, North Carolina 2982.
Conostigmus cylindricus,
 taxonomy, synonymy 8833.
Conostigmus melanocephalus,
 taxonomy, synonymy 8833.
Conotelus,
 taxonomic revision, morphology, West Indies 8750.
Conotelus ocellatus,
 new species, taxonomy, morphology 8750.
Conotelus zayasi,
 new species, taxonomy, morphology 8750.

- Consanguinity**, population genetics, *Apis mellifera* 8666.
- Conservation**, endangered species, population decline, *Callosamia securifera*, North America 2106.
systematics classification systems, role, *Lepidoptera* 4760.
- Conspecifics**, cannibalism, *Philonotus basilaris* 6740.
eggs, effects on oviposition, *Eurypterus* 6675.
experience, effects on maze learning, *Isopora* 1165.
morphology, *Brahmaea christophi*, *Brahmaea ledereri*, Turkey 5513.
pheromones, attractancy, *Aponomma hydrosauri* 7332.
recognition, courtship, phylogeny, *Drosophila nasuta* 7490.
recognition, mate selection, *Polistes fuscatus* 6664.
recognition, tactile stimuli, mating behavior, *Enallagma* 6669.
social interactions, *Reculitermes* 413.
visual discrimination, display, distance, *Portia fimbriata* 5668.
- Construction**, cocoons, maternal behavior, *Uloborus ferokus* 6672.
cocoons, silk, *Hyalophora cecropia* 5887.
comb, colonial characteristics, *Vespa* 3842.
comb, effects on honey yield, apiculture, *Apis mellifera* 3775.
comb, sheltering behavior, *Hymenoptera* 1477.
disturbance, effects on community composition, vegetation patterns, *Arthropoda* 1284.
hives, apiculture, *Apis mellifera* 6180.
defense mechanisms, sound production (biological), *Synoea virginea* 3847.
territoria, colonies, development, *Odontotermes formosus* 2781.
webs, interspecific relationships, *Dendromyrmex chartifex*, *Dendromyrmex fabricii* 2272.
- Consummatory behavior**, measuring techniques, *Apis mellifera* 3572.
- Contact dermatitis**, case reports, man, *Thaumetopoea pityocampa* 3694.
man, case reports, *Coccinellidae* 3680.
- Containers**, design, *Insecta*, transport, shipment, samplers 1689.
stored products, pest resistance, *Insecta* 9337.
- Contaminants**, diets, larvae, *Heliothis* 735.
- Contamination**, damage, sauerkraut, *Thrips tabaci* 8508.
honey, microorganisms, physicochemical properties 8503.
honey, sterilization, α -radiation, *Streptococcus* plume 8475.
insecticides, insecticides, pollinators, *Megachile rotundata* 4317.
- Costaria nigricollis**, pest control, insecticides, efficacy 5396.
pest resistance, biochemistry, *Sorghum bicolor* 4564.
sexual reproduction, sex ratio, single sex progeny 1915.
- Costaria tritici**, population dynamics, crop fields, Germany, Fed. Rep. 6859.
- Costant**, mRNA, developmental stages, *Drosophila melanogaster* 1493.
- Continuous culture**, cell lines, *Heliothis virescens* 2512.
cell lines, methodology, *Aedes albopictus* 2514.
magnetic fields, effects on mutation, fecundity, *Hesperocimex* 7493.
pathogens, trypanosomiasis, *Trypanosoma brucei* brucei, *Glossina morsitans* 8419.
- Continuous reinforcement**, foraging behavior, flowers, *Bombus edwardsii* 3543.
- Contortylencus diplogaster**, parasitism, *Ips sexdentatus* 6879.
- Contraction**, gut, rhythms, larvae, *Bombus mori* 2549.
smooth muscles, reproductive organs, 5-hydroxytryptamine, proctolin, *Tabanus proximus* 965.
- Control**, biological control, grazing defoliation, *Inopus rubriceps*, Australia 729.
borers, *Coleoptera*, *Lepidoptera* 3628.
cross-pollination, methodology, *Aphis mellifera* 1280.
disease reservoirs, *Culex pipiens*, *Africa* 1316.
ectoparasites, resistance, cattle hybridization, *Haemaphysalis longicornis* 649.
food intake, mechanoreceptors, *Culiseta inornata* 3312.
fruits infestation, pests, *Polyphagotarsonemus* 741.
larvae, *Anopheles freeborni*, *Culex tarsalis*, parasites, postparasites, *Romanomermis cuculivora* 2168.
legislation, pesticides encapsulation, apiculture, USA, Massachusetts 3732.
pests, infestation, *Ceratitis capitata*, USA, California 1442.
pests, sex pheromone, *Pectinophora gossypiella*, USA, Arizona 1463.
sterilization, irradiation, strontium 90, survival, sex differences, *Glossina palpalis* 1470.
water levels, rivers, Simuliidae, South Africa 669.
- Control programs**, African trypanosomiasis, male sterility, decamethrin, *Glossina*, Upper Volta 1345.
attractants, efficacy, *Euxoa tessellata* 3583.
attractants, repellents, host plants, *Cavaniella agopodii* 2056.
biological control, natural enemies, competition, *Homoptera*, *Lepidoptera*, *Coleoptera* 6095.
biological control, parasitoids, *Trichogramma* 1421.
biological control, review, *Culicidae* 643.
biophysics, reviews, *Termitidae* 738.
cattle pest control, insecticides, *Hypoderma lineatum* 2173.
chemical control, larvae, *Calidae*, *Czechoslovakia* 2930.
chemosterilants, *Insecta* 4575.
chemosterilization, *Glossina morsitans morsitans*, *Glossina pallidipes*, Zimbabwe 3667.
damage, tropical environment, *Isopora* 2967.
disease transmission, African trypanosomiasis, man, cultural characteristics, *Glossina*, Africa, East 1341.
disease transmission, eradication, *Glossina*, Africa 1362.
disease transmission, insecticides, effects on wildlife management, nontarget organisms, *Glossina* 1346.
disease transmission, trypanosomiasis, trapping, *Glossina*, Congo, People's Rep. 9244.
eradication, *Cochliomyia hominivorax*, USA 1459.
fumigation, methodology, *Ceratitis capitata* 1422.
- Control programs, (continued)**
hives damage, predation, *Ursus americanus*, *Apis mellifera* 3040.
host plants pests, biological control, chemical control, *Earias*, *Pectinophora gossypiella* 1444.
insecticides, *Orseolia oryzae*, China, People's Rep. 1013.
juvenile hormones, methoprene, effects on emergence, *Culex quinquefasciatus*, *Anopheles stephensi*, *Aedes aegypti* 1360.
larvae overwintering, silage, *Stomoxys calcitrans* 2199.
life cycle, pests, *Lymantria xylinia*, China, People's Rep. 4580.
livestock pests, *Isodidae*, Barbados 1328.
malara vectors, reviews, *Culicidae* 8409.
mounds, pests, pastures, destruction, *Solenopsis invicta* 1460.
oocysticercosis, geographical distribution, *Simulium*, Senegal 9249.
parasites, domestic animals 1418.
parasites infestation, apiculture, Varroa jacobsoni, *Apis mellifera* 2971.
parasites, pests, *Spodoptera littoralis*, Egypt 6975.
pest control, crop production, *Insecta*, *Medicago sativa* 3015.
pest control, crop protection, conferences, *Insecta* 3954.
pest control, crop protection, *Insecta* 3709.
pest control, environment management, wetlands, *Aedes sollicitans*, USA, Rhode Island, Barnington 5359.
pest control, forests, *Insecta*, China 2216.
pest control, management, computer applications, microprocessor software system 8564.
pest control, natural enemies, *Rhopalum californica* 6171.
pest control, *Sorghum*, *Atherigona soccata* 4556.
pest control, suppression, populations, *Cochliomyia hominivorax* 8560.
pest outbreaks detection, pheromone traps, *Heliothis armigera* 6183.
pesticide resistance evolution, population genetics, *Culicidae* 5501.
pests, abundance, *Isodidae*, Botswana 3672.
pests, *Atherigona*, Sudan 4562.
pests, biology, conferences, *Atherigona soccata* 4496.
pests, damage, crop fields, *Arachis hypogaea*, *Isopora* 5360.
pests, environmental management, *Insecta*, USA, Arizona 1434.
pests, life cycle, *Zonocerus variegatus*, Nigeria 8481.
pests, pesticide resistance, biological control, chemical control, agricultural practices, *Diatraea saccharalis* 1430.
pests, population growth, *Stilpnotus oryzae* 5333.
pests, predators, *Stethorus picipes*, *Tetranychus urticae* 3776.
pheromone traps, sex pheromone, *Earias insulana* 2078.
population genetics, African trypanosomiasis, epidemiology, *Glossina* 1336.
population studies, markers, coloration mutants, *Pectinophora gossypiella* 8364.
salt marshes, efficiency, quantitation, methodology, *Culicidae* 1351.
sterile-release, orchards, *Cydia pomonella*, Canada, British Columbia 3815.
sterile-release, population dynamics, males, competition, mathematical models 807.
sterilized organisms, dispersal, *Ceratitis capitata* 6136.
stored products pest control, growth regulators, *Coleoptera* 3787.
traps, attractants, *Glossina morsitans morsitans*, *Glossina pallidipes*, Zimbabwe 3670.
traps, efficacy, *Glossina morsitans morsitans*, *Glossina pallidipes*, Zimbabwe 3669.
traps, *Glossina* 2936.
trialenodes vaporariorum, biological control, parasites, *Encarsia formosa* 1424.
vectors, disease transmission, habitat alterations, salt marshes, *Culicidae*, USA, Georgia, Glenn Co. 1437.
wood control, galls, *Cirsium arvense*, *Urophora cardui*, Canada 3805.
- Controlled conditions**, pesticide applications, methodology, biodegradability, cellophane bags 4621.
- Convergence zones**, atmospheric conditions, night flight activity aggregation, *Insecta* 7573.
- Convolutus arvensis**, host plants, species composition, *Insecta*, Egypt 6807.
wood control, biological control, defoliation, *Galeruca rufa* 2944.
- Convolutus aspius**, association, host plants, *Insecta*, Canada, Ontario 6794.
- Coordination**, walking, *Phasmatodea* 115.
- Copidognathus abyssinicus**, new species, taxonomy, morphology, Argentine Basin 8718.
- Copidognathus abysorum**, new species, taxonomy, morphology, Argentine Basin 8718.
- Copidognathus atlanticus**, new species, taxonomy, morphology, Argentine Basin 8718.
- Copidosoma dentatis**, parasites, incidence, *Phthorimaea operculella*, Australia, Queensland 2828.
- Copidosoma koehleri**, parasites, abundance, seasonal variations, South Africa 2122.
parasites, toxicity, insecticides 7411.
survival, environmental effects, relative humidity 1935.
- Copidosoma truncatellum**, parasites, effects on hosts development, *Trichoplusia ni* 8327.
- Copris lunaris**, life history, sexual reproduction, sexual behavior, nesting behavior 3533.
parental behavior, brood care, nesting 4292.
- Copris scutellaria**, morphology, head, mouthparts 8894.
- Coprophagy**, guilds, resource utilization, coexistence, *Aphodius* 9211.
- Coprophagaeus telamon**, feeding behavior, bones, 497.
- Coprophilus organilis**, environmental impact, forage production, *Geotrupes*, *Cynodon dactylon* 1252.
- Coprophilus fungi**, population levels, grazing, *Lycocella mali* 4479.
- Coprodicia kalmiella**, herbivory, egg laying, mortality, leaf area reduction, *Chamaedaphne calyculata* 530.
- Coptopteryx argentina**, population studies, life history, habitat, sexual reproduction, Argentina, Buenos Aires 5237.
- Coptopteryx gayi**, population studies, life history, habitat, sexual reproduction, Argentina, Buenos Aires 5237.
- Coptopteryx viridis**, population studies, life history, habitat, sexual reproduction, Argentina, Buenos Aires 5237.

- Coptoteryx viridis**, (continued)
Aires 5237.
- Coptotermes**,
colonial characteristics, reproduction, castes 6217.
- Coptotermes acauliformis**,
food preferences, softwoods, decay fungi effects on 1196.
- Coptotermes formosanus**,
behavior, effects on pest control, evaluation, insecticides 4606.
food availability effects on survival, reproduction, colonies 4646.
lipid biosynthesis, metabolism, symbionts effects on 3573.
pest control, insecticides, avoidance behavior 8554.
behavior, feeding behavior, wood extracts effects on 1810.
- Coptotermes belini**,
survival, response, wood, essential oils 2850.
- Coptotermes klishti**,
feeding behavior, wood damage, urban environment, India 1405.
- Coptotermes laticus**,
colonial characteristics, reproduction, castes 6217.
gut microflora, alterations, effects on, nitrogen metabolism 233.
- Coptotermes testaceus**,
pests, infestation, Manihot esculenta crop fields, Brazil, Para State 4597.
- Copulation**,
adaptiveness, breeding success, Nezara viridula 1898.
BHC effects on, *Rodnius prolixus* 9056.
body movements, orientation, *Apaenales glomeratus* 7487.
breeding success, body size, effects on, strains, *Musca domestica* 2747.
chemosterilization effects on, pest control, *Glossina morsitans* 5268.
courtship, reviews, Araneae 5847.
duration, males, γ -radiation effects on, *Lymantria dispar* 373.
environmental factors, temperature, *Ascia monuste orseus* 5104.
life cycle, larvae morphology, *Synaldis unialis* 7265.
male selection, *Pogonomyia californicus* 8257.
mating behavior, *Antheraea yamamai*, Japan 1910.
mating behavior, chemosterilization effects on, *Aedes aegypti*, *Anopheles atroparvus* 9046.
mating behavior, competition, males, *Calopteran* discrepans 1911.
mating behavior, genes, *Drosophila melanogaster* 5484.
mating behavior, *Glossina morsitans morsitans*, *Glossina austeni* 5841.
mating behavior, *Imparipes histicus* 6670.
mating behavior, protection, females, territorial behavior, *Hetaerina vulnerata* 4299.
mating behavior, *Streptogonopus jerdani* 5109.
morphology, *Coenagion scutellum* 5645.
mounting behavior, competition, *Lygaeus equestris* 3535.
physical characteristics, *Plodia interpunctella*, *Cadra cautella*.
Anagasta kuehniella 408.
reproductive behavior, spermatosa, *Nezara viridula* 398.
role, infoliate organ, *Atherigona* 4105.
seasonal variations, bait attractancy, *Shirahoshizo pini*, *Shirahoshizo rufecens*, *Shirahoshizo insidiosus*, Japan 2901.
sexual behavior, flight activity, *Eudictya tibialis*, USA, Maryland 2733.
sperm use, females, *Drosophila pseudoobscura* 397.
stridulation, courtship, mounting behavior, *Palmacorixa nana* 4300.
- Coquillettia venezuelensis**,
Guana virus isolation, Surinam 3427.
- Coquillettia xanthogaster**,
disease reservoirs, geographical distribution, Australia, Ord R. 671.
- Corchorus capsularis**,
leaves, antifeedants, *Myllocerus discolor* 5207.
plant extracts, antifeedants, *Myllocerus discolor* 2851.
- Coryra cephalonica**,
development, fecundity, rearing, media (culture), casein, cholesterol, glucose 7452.
eggs, biochemical composition, embryogenesis 4244.
eggs, UV radiation, temperature effects on, *Trichogramma brassiliensis* rearing 7450.
host preferences, host plants, varieties, *Triticum aestivum* 7674.
life cycle, environmental effects, temperature, relative humidity, development, mortality 1127.
precocene II, effects on morphogenesis, reproductive organs 7425.
rearing, media (culture), growth index, larvae 7467.
stored products pests, development, whey-soy drink mix 9323.
- Cordia curassavica**,
biological control, weed control, parasites, *Metrogaleruca obscura*, *Eurytoma attiva*, Malaysia 2960.
- Cordilura varipes**,
feeding behavior, predation, *Culicoides variipennis*, USA, Virginia 6041.
- Cordulegaster boltoni**,
territorial behavior, aggressive behavior, Germany, Fed. Rep., Fichtelgebirge 8617.
- Cordulia sena**,
diapause, oocytes, rRNA biosynthesis 2680.
- Cordyceps ocellatus**,
pathogens, *Isopora*, Mexico 2626.
- Cordyceps**,
pathogens, host specificity, tropical environment, forests, Insecta 3649.
- Cordyceps myrmecophila**,
association, pathogens, *Palitoyreus tarsatus*, Ivory Coast 6608.
- Cordyceps unilateralis**,
epitaxia, infestation, *Camponotus*, Brazil, Amazonas 5023.
- Cordylobia anthropophaga**,
case reports, infestation, Kenya 4515.
- Coreidae**,
overwintering behavior, ecological distribution, USA, South Carolina 455.
11 species, feeding behavior, food plants, aggressive behavior, sex ratio, Costa Rica, Guanacaste Province 2801.
- Coreitarsomeminae**,
parasites, Hemiptera, Asia, Australia 1581.
- Coreitarsomemus**,
morphology 1581.
- Coreitarsomemus bifidus**,
new species, taxonomy, morphology 1581.
- Cortilidia**,
new genera, taxonomy, morphology, Peru 8806.
- Cortilidia leuta**,
new species, taxonomy, morphology, Peru 8806.
- Cortimalia betpakdalensis**,
new species, taxonomy, morphology, USSR 5537.
- Cortimelaena extensa**,
morphology, eggs, nymphs, development, feeding, host plants, *Nicotiana glauca*, USA, California 8290.
- Cortimelaena**,
overwintering behavior, ecological distribution, USA, South Carolina 455.
- Cortiza**,
taxonomy, synonymy 1635.
taxonomy, synonymy, Europe 5576.
- Cortiza dentipes**,
sound production, stridulation, communication, acoustics 8615.
- Cortiza ibérica**,
new species, morphology 1635.
new species, taxonomy, morphology, Spain, Portugal 5576.
- Cortiza punctata**,
auditory perception, receptors, neurophysiology, electrical properties 4134.
sound production, stridulation, communication, acoustics 8615.
- Cortikidae**,
abundance, pathogens, ponds 1007.
auditory communication 9077.
navigation behavior, role, light polarization 2857.
occurrence, seasonal variations, annual variations, species composition, Finland 8673.
sound production, stridulation, communication, acoustics 8615.
- Cornea**,
compound eyes, ultrastructure, optical properties, *Apis mellifera* 144.
- Cornitermes**,
defense secretions chemical composition, phylogeny 1566.
- Cornuariesethes**,
new genera, taxonomy, morphology, Africa 7939.
- Cornuprocerus**,
new genera 4029.
- Corosoma**,
taxonomy, morphology 8742.
- Corotoca melanthero**,
geographical distribution, morphology, Brazil 6377.
- Corotoca phyla**,
geographical distribution, morphology, Brazil 6377.
- Corotoca severi**,
new species, taxonomy, morphology, Brazil 6377.
- Corpora allata**,
ablation, effects on juvenile hormones biosynthesis, *Diptera punctata* 2580.
ablation, medial neurosecretory cells, *Eurygaster egricaps* 6590.
activity, juvenile hormone, caste determination, *Phlebotomus* 7477.
activity, ovary maturation, *Dysdercus cingulatus* 9060.
activity, precocene II effects on, *Dysdercus cingulatus* 9052.
biosynthesis, juvenile hormones, vitellogenesis, *Locusta migratoria* 2714.
control, cuticle pigmentation, *Corpora allata* 8898.
developmental stages, histology, physiology, *Achoea junata* 4176.
effects on growth, morphology, larvae, pupae, *Dicranis obliqua* 7475.
endocrine function, diapause, females, *Tetrix undulata* 3481.
juvenile hormones activity, photoperiod effects on, *Pterostichus nigrita* 2700.
juvenile hormones analogs effects on, metamorphosis, *Pyrrhocoris apterus* 2711.
juvenile hormones biosynthesis, farnesic acid stimulation, radioassays, *Diptera punctata* 208.
juvenile hormones biosynthesis, *Locusta migratoria* 2590.
juvenile hormones biosynthesis, starvation, neurophysiology, *Lepidotarsa decemlineata* 8106.
juvenile hormones effects on, vitellogenesis, *Kaloterpes flavicollis* 4280.
juvenile hormones regulation, ovary effects on, *Aedes aegypti* 2583.
juvenile hormones synthesis, development, *Manduca sexta* 5826.
juvenile hormones synthesis, inhibition, precocenes effects on, *Ageratum houstonianum* 3342.
neurosecretion cells, *Poecilocus pictus* 5666.
oogenesis, cell cycle, juvenile hormones, *Diptera punctata* 2710.
regulation, hormones, *Diptera punctata* 3494.
reproductive status, foundress, *Polistes gallicus* 5060.
- Corpora cardiaca**,
hormones, biosynthesis, respiratory pigments, *Blaberus discoidalis* 1774.
insecticides, effects on hormones release, hyperlipemic hormone, *Locusta migratoria* 5797.
neurosecretion cells, *Poecilocus pictus* 5666.
- Corproica pusio**,
new species, taxonomic revision 2417.
- Correlation analysis**,
body length, body weight, energy content, *Palomena prasina* 51.
life span, enzymatic activity, superoxide dismutase, *Drosophila melanogaster* 946.
sugar plasma levels, honey production, *Apis mellifera* 5325.
toxicity, effects on enzymatic activity, pesticides, *Aphis citricola* 1064.
- Corrhecerini**,
taxonomy, new taxa, Japan 1608.
- Corrodopsylla curvicauda**,
parasites, range extension, Mammalia, USA, Alaska 7473.
- Corsica**,
geographical distribution, biogeography, morphology, new species, *Labidostomidae* vialae, *Labidostomidae corsicum* 4454.
- Cortex**,
eggs, receptors development, ovulation, *Drosophila* 1079.
- Corticaria fagi**,
geographical distribution, new records, Sweden 3943.
- Corticulus glaber**,
food preferences, predation, *Dendroctonus frontalis* 2797.
life cycle, development time, morphology, larvae 6724.
- Corticulus parallelus**,
food preferences, predation, *Dendroctonus frontalis* 2797.
- Corynthrix borealis**,
new taxa, morphology, taxonomy 22.
- Corynotrichini**,
new taxa, morphology, taxonomy 22.
- Coryphorus aquilus**,
new genera, new species, *Coryphorus aquilus*, South America, Amazon R. 3206.
new genera, new species, morphology, South America, Amazon R. 3206.
- Corythucha ciliata**,
flight activity, seasonal variations 1976.

- Corythucha distincta**, infestation, host plants, *Cirsium canescens*, USA, Nebraska 9163.
infestation, host plants, damage, *Cirsium canescens*, USA, Nebraska 5198.
- Coscinoptera panochensis**, new species, taxonomy, morphology, USA, California 6384.
- Cosella ichnocarpasia**, new species, taxonomy, morphology, India 7138.
- Cosmetolaelaps**, new species, symbionts, taxonomy, *Onthophagus* 800.
Cosmetolaelaps deserti, new species, symbionts, taxonomy, *Onthophagus* 800.
Cosmetolaelaps dolicanthus, new species, symbionts, taxonomy, *Onthophagus* 800.
Cosmetolaelaps microsetus, new species, symbionts, taxonomy, *Onthophagus* 800.
Cosmetolaelaps oligosetus, new species, symbionts, taxonomy, *Onthophagus* 800.
Cosmetolaelaps reticulatus, new species, symbionts, taxonomy, *Onthophagus* 800.
Cosmetolaelaps wallacei, new species, symbionts, taxonomy, *Onthophagus* 800.
Cosmochthonius bhutanensis, new species, taxonomy, morphology, India, Bhutan 6346.
Cosmoconus meridianator, new records, geographical distribution, Sweden 4724.
- Cosmopoda aenopus**, new genera, morphology, Madagascar 843.
- Cosmopoda molybdopus**, new species, morphology, Madagascar 843.
- Cosmopolites sordidus**, chemical control, pest control, insecticides 5377.
- Cosmopterigidae**, larvae, predators, seeds, *Hybanthus prunifolius*, Panama 2080.
- Cosmozercon**, taxonomy, new genera, morphology, USA 4.
- Cost-benefit analysis**, forest management, pest control, *Lymntria dispar* 734.
mathematical models, pest control, environment management 1585.
- Costa Rica**, aggregation, life cycle, *Anguria warsecwiczii* host plants, *Paryphes blandus* 7553.
ecological control, predators, eggs, *Diabrotica*, *Solenopsis geminata*, phelidole 2993.
carnion, community composition, succession, *Insecta* 5166.
disease transmission, viruses, bean curly dwarf mosaic virus, bean mild mosaic virus, *Coleoptera* 7658.
ecological distribution, abundance, leaf litter, *Epiperipatus ishmicola* 7578.
ecology, habitat comparison, webs, *Araneida* 1272.
feeding behavior, competition, aggression, interspecific relationships, *Trigona*, *Phaethoniscus superciliosus* 3571.
food selection, defoliation, *Vernonia patens*, *Pericopsis leucophaea* 5164.
habitat, ecological distribution, environmental conditions, *Agrias amydon* 7598.
nesting behavior, habitat selection, *Metapolybia azteca* 7800.
nesting behavior, sexual reproduction, social interactions, *Trypargilum nitidum* schultzei, *Trypargilum lactiaris*, *Trypargilum saussurei* 6980.
nests, design comparison, *Nasutitermes corniger*, *Nasutitermes ephratae* 1958.
new records, geographical distribution, *Anotylus insignitus* 2371.
new species, taxonomy, morphology, *Baryconus gallego* 7986.
new species, taxonomy, morphology, *Pseudolobetus ubialis* 7943.
new species, taxonomy, morphology, *Sericopecten*, *Brachypelma* 6352.
new subspecies, taxonomy, morphology, *Agrias amydon* 7233.
parasites, interspecific relationships, competition, host specificity, *Chrysomelidae*, *Heliconia* 4370.
parasitoids, endocite, *Ceratitis capitata*, *Anastrepha* 2818.
pests, predation, forests, *Phlebotomus* 7604.
species composition, inventories, *Archaea* 7124.
streams, flooding, substrata, environmental effects, abundance, *Limnocoens insularis*, *Cryptocricos latus* 2294.
sympatric populations, habitat, *Morpho granadensis polybaptus*, *Morpho peleides* *limpida* 6019.
sympatric populations, niche overlap, interspecific relationships, *Morpho granadensis polybaptus*, *Morpho peleides* *limpida* 5141.
taxonomy, morphology, *Psoocoptera* 6460.
taxonomy, morphology, *Theraphosidae* 3173.
taxonomy, new species, morphology, *Epilampra involutus*, *Epilampra belti*, *Epilampra unistilata*, *Epilampra rothi* 2471.
- Costa Rica, Cocos I.**, new species, taxonomy, morphology, *Scaphytopius biflavus*, *Chlorotenix canolatus*, *Idona murrayae* 7981.
new species, taxonomy, morphology, *Tortora hoguella* 4888.
- Costa Rica, Guanacaste Province**, feeding behavior, food plants, 11 species, *Coreidae* 2801.
- Costelytra zealandica**, pests, disease transmission, *Hafnia alvei*, New Zealand, Canterbury 5723.
population dynamics, population regulation, pest outbreaks, New Zealand 6911.
- Costelytra zelandica**, population levels, pasture defoliation effects on, soil temperature 545.
- Costus**, plant communities, association, species richness, species composition, *Fimbricidae*, Panama 8344.
- Cotinus**, host plants, *Gelechiidae* 4896.
- Couchia circumplexa**, new species, parasites, eggs, *Chironomidae* 2152.
- Coumaphos**, Bay Vb 9328 Flowable, acaricides, pest control, cattle, *Boophilus microplus*, *Boophilus axiandus* 4509.
insecticides, pesticide applications, dipping, cattle 8433.
pest control, chemical control, *Boophilus*, *Boophilus annulatus* 8531.
- Coumarin**, antifedants, food consumption, food conversion, *Spodoptera littoralis* 7345.
plant extracts, oviducts, growth inhibitors, *Eupatorium japonicum*, *Drosophila melanogaster* 6621.
- Coumestrol**, host plants chemical composition, pests effects on, *Acyrthosiphon*, *Medicago sativa* 540.
- Coumeters**, acoustics, design, traps, sex pheromone, *Insecta* 54.
- Courtship**, adults, taxonomy, *Epicauta caustica*, *Epicauta floydwerneri*, new species, *Epicauta brasiliensis*, *Epicauta crucera* 2496.
aggressive behavior, dominance, males, *Epicauta pennsylvanica* 4296.
copulation, reviews, *Araneae* 5847.
display, *Platygypha fitzsimoni*, *Chlorocypha consuetia*, *Rhincocypha unimaculata* 6667.
display, use, systematics, *Salicidae* 8731.
eye color mutants, genetics, heterozygosity, *Drosophila melanogaster* 6276.
genes, hybrids, *Drosophila melanogaster*, *Drosophila simulans* 3109.
inhibition, sex pheromone mutants, *Drosophila melanogaster* 972.
males, stridulation, calling behavior, *Ligyrocotis diffusus* 1904.
male selection, discrimination, age, body size, *Perns protodice* 4297.
mate selection, females, *Colias eurytheme*, *Colias philodice* 407.
mate selection, *Phidippus femoratus* 6663.
mating behavior, auditory stimuli, auditory perception, *Drosophila mercatorum* 5852.
mating behavior, *Brachymeria lassus* 2741.
mating behavior, *Dacus cucurbitae* 2745.
mating behavior, females competition, *Anabrus simplex* 3532.
mating behavior, *Glossina moritans moritans*, *Glossina austeni* 5841.
mating behavior, *Heliothis virescens* 1900.
mating behavior, *Mallophora schwarzii*, Panama, *Gambusia* 6681.
mating behavior, maturation, *Anastrepha ludens* 3529.
mating behavior, population structure, population genetics, *Drosophila primaeva*, Hawaii 1554.
mating behavior, webs, *Portia fimbriata*, Australia, Queensland 4287.
mating behavior, *Wiedemannia lepidus* 3526.
mutants, photoaxis, visual stimuli, *Drosophila melanogaster* 4689.
recognition, conspecifics, phylogeny, *Drosophila nasuta* 7490.
reproductive isolation, *Aponomea hydrosauri*, *Amblyomma albolineatum*, *Amblyomma limbatum* 7494.
reproductive isolation, *Drosophila mojavensis*, *Drosophila arizonensis* 402.
sex pheromone role, biochemical analysis, diets, *Urethessa ornatrix* 4304.
sexual behavior, mutants, *Drosophila* 4286.
social spacing, sound production, *Cystosoma saundersi* 2283.
song, genetics, *Drosophila melanogaster*, *Drosophila simulans*, *Drosophila mauritiana* 1536.
stridulation, mounting behavior, copulation, *Palmacorixa nana* 4300.
swarming, sex pheromone, *Diplazon pectoratorius* 5110.
tracking, females, *Drosophila melanogaster* 1140.
visual communication, bioluminescence, neurophysiology, *Photinus luciferescens* 7494.
- Cowdria ruminantium**, pathogens, vectors, *Amblyomma maculatum* 7639.
- Cowdria ruminantium**, disease transmission, domestic animals, larvae, *Amblyomma sparsum* 2175.
- Cmma**, nerve 3B, ultrastructure, strand receptors, *Orthoptera* 8067.
- Copa**, morphology, comparison, *Apodema* 6511.
- Coxal organs**, ultrastructure, epithelium, *Gophomorphia* 6593.
- Crabro advena**, nesting behavior, variability 438.
- Crabro monticola**, nesting behavior, usurpation, burrows 9090.
- Crambus ericeus**, new species, taxonomy, morphology, Hungary 7995.
- Craononyx gracilis**, abundance, seasonal variations, islands lakes, USA, Georgia, *Paspalum fluitans* 2293.
- Crematogaster**, association, host plants evolution, *Byttneria aculeata* 7554.
- Crematogaster depressa**, association, effects on ecological distribution, *Cataulacus guineensis*, Ghana 578.
- Crematogaster laeviuscula**, predation, *Polistes exulans*, mortality, population dynamics 2155.
- Crematogaster lineolata**, community composition, habitat comparison, USA, South Carolina 1269.
- Crematogaster quadriformis**, chemical control, pest control, bait toxicity 2991.
- Crepicardus**, taxonomy, morphology, keys, Madagascar 4797.
- Cretaceous period**, fossils, wings, morphology, *Phasmida*, Greenland 4752.
- Crete**, mortality, pests, larvae, *Dacus oleae*, *Olea europaea* 7798.
new records, geographical distribution, *Megacephala euphratica* 2373.
new species, taxonomy, morphology, *Anthaxia aradana*, *Anthaxia brodskyi* 8760.
new species, taxonomy, morphology, *Parandapya izanoudakisi* 8782.
new subspecies, taxonomy, morphology, *Apis mellifera adam* 4869.
occurrence, *Insecta* 9471.
occurrence, species composition, *Symphyta* 6427.
pests, infestation, *Nerium oleander*, *Dacus oleae* 9310.
- Cricetidae**, predation, *Tenodera aridifolia sinensis* 2803.
- Cricket paralysis virus**, proteolysis, purification, characterization, cell culture, *Drosophila melanogaster* 8091.
- Cricotopus**, karyotypes, phylogeny, taxonomy 2408.
- Cricotopus sylvestris**, production, biomass, dry weight, USA, New York, Hudson R. 756.
- Cricotopus zavrelli**, new species, morphology, taxonomy 2424.
new species, taxonomy, morphology, Poland 4837.
- Crisocephala torrida**, chromosomes, karyotypes, India 5468.
- Crinum asiaticum**, food plants, antifedants, *Schistocerca gregaria* 7348.
- Crinum bulbospermum**, food plants, antifedants, *Schistocerca gregaria* 7348.

- Crocephalus syriacus**, cellulose digestion, enzymes 4156.
wood borers, digestion, nutrition, feeding behavior 4344.
- Critidia luciliae**, heteroduplex, DNA, analysis, kinetoplasts 8627.
- Crocidolomia binotalis**, diets, rearing 1746.
- Crocinae**, taxonomy, morphology, Africa 1665.
- Crocidia semipurpurea**, sex pheromone, pheromone traps, chemicals 2095
- Croesus persicus**, new species, taxonomy, morphology, Iran 6438
- Crop**, biochemical characteristics, wings removal effects on, *Solenopsis geminata*, *Solenopsis richteri* 1754
- Crop fields**, abundance, distribution, barriers effects on, *Chrysops atlanticus* 2151.
abundance, mulches effects on, *Empoasca kraemeri* 2246
abundance, seasonal variations, larvae, Lepidoptera, USA, New York 6119.
abundance, seasonal variations, *Stelidota geminata* 3826
abundance, species composition, Carabidae, USA, Michigan 3772.
Trichogramma, Zea mays, USA, Maryland 5600
agricultural practices effects on abundance, pests, Insecta 3035
agricultural practices, effects on movements, Insecta 6198
association, new species, Tetranychidae, India 8716
Avena, Coleoptera, fauna, species composition, Finland 2220.
Brassica campestris, pest control, economies, Phyllostreta, Canada 8534
Camellia sinensis, pests, abundance, species richness, Arthropoda 4574
chemical control, insecticides, Carabidae 1394
community composition, abundance, Glycine max, Arthropoda 2164.
community composition, abundance, Leguminosae, Insecta 6901.
crop yield, pest control, *Epilachna varivestis*, Glycine max, USA, Maryland 3795.
damage, agricultural practices, Zea mays, *Busseola fusca*, *Sesamia calamistis* 1748
damage, *Alternaria tenuissima* infection, *Cerotoma trifurcata*, Glycine max 9277.
damage, *Bemisia tabaci*, *Trialeurodes abutilonis*, *Aleyrodes spruceoides*, USA, California 9290
damage, *Helianthus annuus*, *Atractomorpha crenulata* 5328.
damage, infestation, *Ostrinia nubilalis*, *Lycopersicon esculentum* 6193.
damage, irrigation, fertilizer applications effects on, *Microtermes obesi*.
Triticum 5372.
damage, pest control, Aphis fabae, British Isles 3800.
damage, pest control, crop rotation, *Microtermes obesi* 5373.
damage, pests, *Helianthus annuus* Poecilimon bosphoricus, Turkey 4537
damage, pests, infestation, *Tetranychus urticae*, *Arachis hypogaea* 3794
damage, pests, life cycle, *Diabrotica* 7715
damage, pests, *Pistacia vera*, *Telphusa pistaciae*, Iran 5296
dexamethin effects on population growth, *Nilaparvata lugens* 6111
delolition, pest control, Insecta, *Solanum tuberosum* 3814
disease control, oils, viruses, vectors, Aphididae '697
eggs: predation, *Heliothis virescens*, USA, Texas 6124
environmental effects population dynamics, *Cichiza graminum*, *Sorghum*, USA, Missouri 6151.
feeding damage, pests, *Oebalus pugnax*, *Sorghum* 8506.
foraging behavior, fenvalerate effects on, *Apis mellifera* 4475.
Gossypium, pest control, alliin, *Pectinophora gossypiella*, *Earias*, *Heliothis armigera*, India 7701.
host plants, *Heteroptera*, *Sorghum vulgare* 2097
host plants, larvae feeding behavior, *Wiseana*, *Trifolium repens* 3568
host plants, leaves damage, feeding, *Tetranychus urticae* 7764
infestation, *Agromyza*, *Medicago sativa*, Europe 5556
infestation, flowering effects on, *Gossypium*, *Pectinophora gossypiella* 3765
infestation, larvae survival, *Diatraea grandiosella* 3737.
larvae damage, pesticide residues effects on, *Diabrotica longicornis*, *Diabrotica virgifera* 3740.
Manihot esculenta, pests, species composition, Insecta, Acari, USA, Florida 4555.
mortality, developmental stages, *Anthonomus grandis grandis*, *Gossypium*, USA, Texas 6125
natural enemies, distribution, *Rhopalosiphum maidis*, Zea mays 7728
occurrence, population dynamics, sampling methods, *Myzus persicae*, *Brevicoryne brassicae*, *Hyadaphis erysimi*, *Macrosiphum euphorbiae*, USA, California 9349
Oryza sativa, flight activity, Delphacidae, Cicadellidae 6711
overwintering, emergence, mortality, *Cylindrocapsus adspersus* 5896.
overwintering, mortality, *Coleomegilla maculata* lengi, Canada, Ontario 6021.
oviposition, eggs abundance, seasonal variations, *Orius insidiosus*, Nibis 5322.
parasitoids, *Heliothis zea*, *Heliothis virescens*, USA, Mississippi 6168.
pathogens, transmission, *Erwinia carotovora*, *Drosophila melanogaster* 3424
pest control, agricultural practices, arid zones, *Insecta* 5401.
pest control, alarm pheromone, avoidance behavior, host plants, Aphididae 7337.
pest control, chemical control, *Chilo partellus*, Zea mays 5400
pest control, chemical control, *Cucurbita*, *Dacus cucurbitae* 7788.
pest control, chemical control, *Elatichoris*, *Cryptophymus*, *Ctenicera* 3829.
pest control, chemical control, *Heliothis armigera*, *Diaporis watseri*, Togo 2987.
pest control, chemical control, insecticides, *Amarasca devastans* 4552.
pest control, chemical control, *Pisum sativum*, *Phytomyza atricornis* 6897.
pest control, chemical control, Zea mays, *Agrotis ipsilon* 3818.
pest control, *Ctenopseus obliquana*, *Epiphyas postvittana*, *Planotortrix excessana* 3816.
pest control, defoliation, *Anticarsia gemmatilis*, Glycine max 6148.
pest control, diflubenzuron efficacy, *Anthonomus grandis grandis*, *Gossypium* 8519.
pest control, fertilizer applications, *Leucanodes orbonalis* 7707.
pest control, insecticides, *Athalia proxima*, *Lipaphis erysimi*, *Concinella septempunctata* 7743.
pest control, insecticides, efficiency, Aphididae 3742.
pest control, insecticides, *Leucanodes orbonalis*, *Solanum melongena* 7678.
pest control, insecticides, *Lycopersicon esculentum*, New Caledonia 4558.
pest control, insecticides, *Podagrica uniforma*, *Podagrica sjostedti*, Nigeria 5402
pest control, insecticides, *Sorghum bicolor*, *Chilo partellus* 7670.
pest control, integrated control, *Chilo partellus*, Zea mays 5406.
pest control, integrated control, efficiency 4536.
pest control, mowing, *Heliothis zea*, *Heliothis virescens*, *Gossypium* 7713.
pest control, pathogens, baculovirus, *Pseudoplusia includens*, Glycine max 6138.
pest control, pathogens, *Lacanobia oleacea*, *Bacillus thuringiensis* 5300.
- Crop fields, (continued)**
pest control, pesticide applications, Insecta 8551.
pest control, pesticide applications, methodology, *Ostrinia nubilalis* 9341.
pest control, repopulation, pesticide applications, *Nilaparvata lugens* 6122.
pest control, sampling methodology, statistical analysis, *Tetranychus urticae*, *Mentha piperita* 8505.
pest control, *Spodoptera litura*, *Brassica oleracea capitata* 8439.
pest control, yield, *Vigna unguiculata*, *Chalcomermis aeneus* 8540.
pest management, sampling methodology, *Arthropoda* 3237.
pest outbreaks, damage, *Mythimna separata*, *Secale cereale*, India 6925.
pest outbreaks, damage, *Odontotermes*, India, Punjab 5370.
pest outbreaks, *Deudorix enjarbas*, India 5315.
pest outbreaks, life tables, *Saccharum officinale*, *Mogania minuta*, Okinawa 6109.
pest outbreaks, *Saccharum officinale*, *Scarabaeidae*, India 5361.
pest resistance, *Leguminosae*, *Graphognathus leucomela*, New Zealand, North I. 9307.
pesticide applications, toxicity, *Apis mellifera*, Zea mays 6202.
pests, abundance, *Phyllostreta crucifera*, *Phyllotreta albionica*, *Phyllodes punctulata*, Canada, Saskatchewan 8482.
pests abundance, predators effects on, *Brevicoryne brassicae* 6908.
pests, abundance, seasonal variations, *Trifolium*, Egypt 6978.
pests, biological control, pathogens, *Entomophthora*, *Aphis fabae* 7760.
pests, *Capsicum annuum*, *Melanotus*, India, Dharwad 5365.
pests, chemical control, pesticide applications, electrostatic sprayer, Insecta 8486
pests, community composition, zonation, *Coleoptera*, Finland 5299.
pests, damage, *Arachis hypogaea*, *Isoptera* 5360.
pests, damage, *Carthamus tinctorius*, *Acanthopisus beliihi* 7779.
pests, dispersal, flight activity, *Schizaphis graminum* 3770.
pests, dispersal, *Tetranychidae* 6976.
pests infestation effects on, *Diatraea grandiosella* 3822.
pests infestation, *Isoptera*, Brazil, Para State 4597.
pests infestation, *Mayetiella destructor*, *Triticum*, USA 2191.
pests, Insecta, *Cajanus cajan* 4553.
pests, parasitoids, host preferences, *Noctuidae*, USA, Florida 4374.
pests, pathogen incidence, *Spodoptera frugiperda*, *Heliothis zea*, USA, Georgia 3407.
pests, pest control, books, Insecta, Indonesia 5543.
pests, population density, agricultural practices effects on, *Oryza sativa*, *Orseolia oryzae*, *Scirpophaga incertulas* 6947.
pests, sampling, methodology 4629.
pests, sampling methodology, *Empoasca fabae*, *Medicago sativa* 8470.
pests, spatial distribution, *Brassica oleracea*, *Myzus persicae*, *Brevicoryne brassicae*, USA, California 4608.
pests, species composition, population levels, *Elatenidae*, *Saccharum officinale*, Brazil, Sao Paulo 6098.
pests, surveys, Acari, Senegal 9285.
pests, taxonomy, *Jassidae*, pests 6419.
plant extracts, effects on parasitism, biological control, *Heliothis zea*, *Trichogramma* 5382.
pollinators, foraging behavior, Insecta, *Brassica oleracea capitata* 5297.
population density, predators, *Arthropoda*, Glycine max, USA, Virginia 6190.
population density, sampling methodology, larvae, *Anticarsia gemmatilis* 6114.
population dynamics, *Contarinia tritici*, *Stilpnotipis mosellana*, Germany, Fed. Rep. 6859.
population dynamics, pests, *Cephus cinctus*, *Triticum* 8464.
population dynamics, pests, *Coccinella septempunctata*, Germany, Fed. Rep. 9339.
population dynamics, species composition, *Araneae*, *Opiliones*, German Dem. Rep., Leipzig 4571.
population dynamics, *Vigna unguiculata*, *Phaseolus vulgaris*, *Empoasca kraemeri*, Brazil 6044
population levels, sampling methodology, Zea mays, *Diabrotica longicornis* 6120.
population status, Aphididae, British Isles 6927.
population studies, sampling, abundance, *Plagiognathus arbutorum*, Sweden 3807.
potato leaf roll virus, abundance, insecticides effects on, Aphididae 3042.
predators, parasites, abundance, Insecta, *Trifolium alexandrinum*, Egypt 6876.
predators, pests, abundance, seasonal variations, *Gossypium*, Egypt 6971.
pests, tungro virus vectors, abundance, *Oryza sativa*, *Neophotix virescens* 7647.
sampling methodology, *Arthropoda* 5629.
sampling methodology, efficiency, *Acyrtosiphon kondoi* 4071.
sampling methodology, *Heliothis zea*, *Lycopersicon* 8529.
sampling methodology, predators, Insecta, *Glycine max* 6145.
sex pheromone, mating behavior disruption, *Heliothis virescens* 3763.
soil fauna, Acari, *Collembola*, community structure, India, Varanasi 4443.
soil, insecticides, carbofuran, persistence 8521.
soil, species composition, abundance, *Arthropoda*, *Camellia sinensis* 5428.
soybean mosaic virus vectors, landing behavior, Aphididae, *Glycine max* 3825.
spatial distribution, *Diabrotica longicornis*, Zea mays, USA, Iowa 6118.
spatial distribution, sampling methodology, *Pseudaletia unipuncta*, USA, Maryland 6113.
spatial distribution, seasonal variations, occurrence, Carabidae, Staphylinidae, Sweden, Uppsala 4543.
species composition, abundance, *Lygus*, USA, Arizona 4604.
species composition, seasonal variations, *Heliothis*, USA, Mississippi 3012.
surveys, abundance, biotypes, *Schizaphis graminum*, USA, Texas 3761.
surveys, community composition, *Araneae*, *Opiliones*, Sweden 4459.
trapping, attractants, *Delia radicum* 3752
vegetables, biological control, parasitism, *Pediobius foveolatus*, *Epilachna varivestis* 2032
vegetation patterns, effects on community composition, Insecta 2888.
Vigna unguiculata, pest control, oils, *Callosobruchus chinensis* 2261.
weed control effect on abundance, Insecta, Glycine max 2997
yield, damage, pests, *Philaenus spumarius*, *Medicago sativa* 8561
yield, pest control, chemical control, *Agrotis ipsilon*, India 7723
Zea mays, infestation, population density, *Sphenophorus callosus* 2249.
- Crop production**, damage, diapause, eggs, *Diabrotica virgifera* 691
damage, economic analysis, *Curculio caryae*, *Carya pecan* 2265
pest control, Insecta, *Medicago sativa* 3015
pests effects on, *Therioaphis trifolii*, *Medicago sativa* 685
pollination effects on, *Frankliniella insularis*, *Cajanus cajan*, Trinidad 737
- Crop protection**, barriers, light effects, colonization, behavior, *Myzus persicae* 1172
biological control, mycotoxins, bioaccumulation, aflatoxins, *Aspergillus flavus*, Zea mays, *Ostrinia nubilalis* 4625
chemical control, monitoring population levels, Insecta 3714.

- Crop protection, (continued)**
 economics, *Gossypium*, *Heliothis armigera*, *Earias vitella*, *Pectinophora gossypiella*, Sri Lanka 6110.
 insecticides, aerial applications, foliar applications, chemigation, pest control 4581.
 integrated control, economics, insecticides, *Oryza sativa*, Philippines 5391.
 integrated control, pest control, environmental protection, *Insecta* 3712.
 mathematical models, damage estimation, pest control, *Phyllocoptruta oleivora* 1400.
 monitoring, *Insecta*, *Nematoda*, *Phaseolus vulgaris* 709.
 pest control, chemical control, conferences, *Insecta* 3954.
 pest control, chemical control, *Insecta* 3709.
 pest control, insecticides, *Gossypium*, *Amaraca devastans*, *Aphis gossypii*, *Heliothis armigera*, *Bemisia tabaci*, Thailand 4622.
 pest control, *Manihot esculenta*, *Insecta*, India 4620.
 pest control, pathogens, *Phyllocoptruta oleivora*, *Hirsutiella thompsonii*, USA, Florida 4548.
 pest control, pesticide applications, environmental protection, *Insecta* 3715.
 pest control, pesticide resistance, *Insecta* 3713.
 pest resistance, vegetables, *Insecta* 3017.
 pests, biological control, *Zea mays*, *Chilo partellus*, India 2958.
 predictions, damage, feeding, *Acrididae*, USA, Montana 4634.
 traps, attractants, color, site location, *Sappya pumila*, *Megachile roundata* 718.
- Crop rotation,**
 biological control, pests, *Ostrinia nubilalis*, Switzerland 6917.
 pest control, *Microtermes obesi* 5373.
- Crop yields,**
 pest control, spatial distribution effects on, *Bathycollaea thalassina* 581.
- Crophius discoonatus,**
 flight activity, seasonal variations 1977.
- Crops,**
 colonization, population levels, *Aphididae* 2891.
 damage, economics, pests, infestation, *Gossypium*, *Heliothis* 4612.
 damage, feeding, *Diabrotica balteata*, *Ceratomya facialis* 9347.
 damage, feeding, *Phaseolus vulgaris*, *Diabrotica balteata*, *Ceratomya facialis* 4609.
 damage, pests, effects on seeds quality, *Glycine max*, *Ceratomya trifurcata* 8511.
 damage, pests, evaluation, *Lens culinaris*, *Spodoptera praefica* 8483.
 damage, pests, feeding, *Brassica oleracea*, *Triphoplusia ni*, *Pieris rapae*, *Plutella xylostella* 8502.
 damage, pests, *Graphognathus leucomela*, *Leguminosae*, New Zealand, North I. 5415.
 damage, pests, *Pisum*, *Malenagromyza phaseoli*, India 9336.
 damage, population density, developmental stages, *Telegryllus commodus* 3827.
 feeding damage, *Carya illinoensis*, *Monellaspis nigropunctata*, *Monella caryella*.
 feeding damage, *Carya illinoensis* 9345.
 host plants, *Loxogramia albicornis*, North America 6156.
 infestation, new records, *Dendroica epiphyas*, India, Kashmir 3000.
 pathogenicity, *Syncephalastrum racemosum*, *Penicillium oxalicum* 1815.
 pest control, pheromones, status 1453.
 pest outbreaks, damage, *Oryza sativa*, *Dicladispa armigera*, India, Tripura 7796.
 pest resistance breeding, *Insecta* 4531.
 pest resistance, *Digitaria*, *Siriba flava* 4607.
 pest resistance, heritability, *Penicillium americanum*, *Blissus leucopterus* 4638.
 pest resistance, varieties, *Sorghum vulgare*, *Chilo partellus* 7784.
 pests, autecology, books, *Leguminosae*, *Bruchidae* 8707.
 pests damage, *Medicago sativa*, *Empoasca fabae* 9292.
 pests, effects on, *Medicago sativa*, *Acyrtophis pisonum* 6970.
 pests infestation, vertical distribution, *Brassica*, *Insecta*, India, Meghalaya 7687.
 pests, natural enemies, predators, *Beta vulgaris*, *Aulacorthum solani*, *Myzus persicae*, New Zealand 8492.
 pests, parasitoids, *Clavigralla tomentoscillalis*, *Atracta* 2814.
 pests, sugar beet, *Chaetocnema coccinea*, *Chaetocnema discreta*, Japan 1241.
 roots absorption, insecticides, parabiosis, *Daucus carota*, *Raphanus sativus*, *Beta vulgaris* 7747.
 yield, pests, defoliation, *Zea mays*, *Mythimna separata* 6941.
- Cross-breeding,**
 fertility, *Tetranychus urticae*, *Tetranychus arabicus* 7880.
 pollinators effects on, *Cajanus cajan*, *Insecta* 1235.
 strains, sex chromosomes, genetic variance, *Drosophila melanogaster* 7029.
- Cross-linking,**
 proteins, biochemical analysis, larvae, cuticle, *Sarcophaga bullata* 884.
 proteins structure, pupae, *Diptera* 8943.
- Cross-pollination,**
 control, methodology, *Aphis mellifera* 1280.
 flowers, color, visual discrimination learning, *Apis mellifera* 9083.
 flowers, *Solanum tuberosum*, efficiency, *Apis mellifera*, *Bombus fervidus*, *Bombus impatiens* 1285.
- Cross-reactivity,**
 NADPH-cytochrome reductase, antibodies, *Spodoptera eridania*, *Insecta* 1768.
- Cross-resistance,**
 insecticides, DDT, permethrin, *Blattella germanica* 5049.
 pesticides, host plants defense mechanisms, *Tetranychus urticae* 6284.
- Crossmids pulchellus,**
 borers, feeding behavior, roots, *Gutierrezia sarothrae*, *Gutierrezia microcephala*, USA, New Mexico 488.
- Crossing-over,**
 chromosomes, hybridization, *Drosophila simulans*, *Drosophila mauritiana* 8655.
 gene conversion, mutants, *Drosophila melanogaster* 9384.
 meiotic centromeres asynapsis effects on, *Drosophila* 9402.
- Crossocerus distinguendus,**
 new species, taxonomy, morphology, British Isles 5591.
- Crotalaria spectabilis,**
 host plants, pests, new records, *Schizotetranychus* 7675.
- Crowding,**
 effects on development, fecundity, *Epiphyas postvittana* 6011.
 effects on eggs size, fecundity, *Chironomus gregarius* 4276.
 effects on, fecundity, *Cylas formicarius elegantulus* 1876.
 effects on morphometry, larvae, *Drosophila melanogaster* 2689.
 effects on, mortality, development, larvae, *Arge nigronodosa*, *Arge nipponensis* 2696.
 effects on mortality, *Oxytrichus sulcatus* 431.
 effects on population dynamics, aestivation, *Aphididae* 9208.
 effects on population growth, phenotype, *Altiaform nymphs*, *Sitobion avenae* 6023.
 effects on pupae metamorphosis, *Galleria mellonella* 2724.
 effects on sex pheromone attractancy, males, *Acanthoscelides obiectus* 5091.
 effects on sex pheromone, sexual behavior, *Acanthoscelides* 4306.
- Crowding, (continued)**
 environmental effects, survival, larvae, *Rhinocyllus conicus* 1938.
 population density, effects on fertility, chemosterilants, *Musca domestica* 384.
- Crowing effects on,**
Acanthoscelides 4306.
- Crozet Is.,**
 community composition, species diversity, *Diptera* 6828.
- Cruciferae,**
 host plants, coevolution, habitat selection, community structure, speciation, *Anthocharis cardamines* 8348.
 host plants, larvae, *Endomorphis americana* 2094.
 introduced species, host plants, oviposition, feeding behavior, *Pieridae* 2048.
Crusoeia lervata *Sardonia*, new subspecies, *Sardonia* 4066.
- Crustaceans,**
 neurons, mechanoreceptors, neuromuscular junctions, toxicity, venom, *Latrodectus mactans* 9017.
- Crynoides peregrinus,**
 oocytes, hemolymph proteins uptake 4271.
- Cryptocricus latus,**
 streams, flooding, substrata, environmental effects, abundance, Costa Rica 2294.
- Cryptidromus,**
 taxonomy, morphology, Costa Rica 3173.
- Cryptophthiria pseudovalis,**
 new species, new genera, morphology 41.
- Cryptilinae,**
 morphology, instars 8034.
- Cryptoblabes guinealis,**
 biological control, parasites, pathogens, pests, *Persea americana*, Israel 5390.
- Cryptocanthos peckorum,**
 geographical distribution, *Scarabidae*, Brazil 4109.
- Cryptocellus bicolor,**
 prey 2146.
- Cryptocellus distinctus,**
 prey, nests 2146.
- Cryptococcus fagisaga,**
 incidence, beech bark disease, soils (calcareous), *Fagus* 2964.
 infection, *Nectra galligena* association, *Fagus grandifolia*, USA, West Virginia, Monongahela National Forest 9276.
- Cryptophytus,**
 pest control, chemical control, *Solanum tuberosum* crop fields 3829.
- Cryptosphaera montezumae,**
 natural enemies, pest control, *Persea* plantations, *Pseudococcus longispinus* 2945.
 predation, biological control, population regulation, *Pseudococcus*, *Saissetia oleae* 3611.
- Cryptolestes,**
 stored products pests detection, traps 3783.
- Cryptolestes ferrugineus,**
 cold acclimation, temperature effects, coma, oxygen consumption 3369.
- Cryptolestes klapperichi,**
 pests, stored products, *Manihot esculenta*, Malaysia 5386.
- Cryptophlebia leucotreta,**
 sex pheromone, chemical composition, attractancy 2599.
- Cryptopygus antarcticus,**
 cold hardness, acclimation, survival, Antarctica, Signy I. 6583.
 cold tolerance adaptations, freezing, Antarctica 2730.
 supercooling, cold hardness, Antarctic 3364.
 temperature tolerance, seasonal variations, Antarctica 1189.
- Cryptorhynchus lapathi,**
 bionomics, life history, biological control, *Benaveria bassiana*, China, People's Rep., Liaoning Province 2780.
- Cryptorhynchus brittoni,**
 geographical distribution, Australia, South Australia 2673.
- Cryptorhynchus mitchami,**
 new species, taxonomy, morphology, Australia, South Australia 2673.
- Cryptorhynchus nigripennis,**
 morphology, females, Australia, South Australia 2673.
- Cryptorhynchus pumilus,**
 geographical distribution, Australia, South Australia 2673.
- Cryptorhynchus pallidus,**
 geographical distribution, Australia, South Australia 2673.
- Cryptorhynchus tectus,**
 geographical distribution, Australia, South Australia 2673.
- Cryptorhynchus trifidus,**
 geographical distribution, Australia, South Australia 2673.
- Cryptosigmatia,**
 abundance, soil, leaf litter, forests, environmental factors, Australia 2881.
 distribution, soil, leaf litter, forests, Australia 4472.
- Cryptostigmatidae,**
 community structure, vegetation effects on, soil fauna, India, West Bengal, Santiniketan 4442.
 population dynamics, abundance, soil properties effects on, plantations 5249.
- Cryptoterms,**
 environmental effects, humidity, hygrotaxis, temperature, acclimation 5128.
 temperature tolerance, acclimation, habitat preferences 1191.
- Cryptoterms brevis,**
 colonial characteristics, castes, geographical variations 6999.
 temperature tolerance, acclimation, habitat preferences 1191.
- Cryptoterms dudleyi,**
 temperature tolerance, acclimation, habitat preferences 1191.
- Cryptoxiles (lymantori),**
 new species, taxonomy, morphology, parasites, *Lymantori decipiens* 2451.
- Crystals,**
 bioassays, toxicity, *Bacillus thuringiensis*, *Ostrinia nubilalis* 5780.
 fibrin, structure, silk, *Bombyx mori* 5719.
- Ctenicera,**
 pest control, chemical control, *Solanum tuberosum* crop fields 3829.
- Ctenicera destructor,**
 larvae, traps, bait, seasonal variations, activity 56.
- Ctenocephalides,**
 infestation, dogs, seasonal variations, South Africa 9247.
- Ctenocephalides canis,**
 parasites, feral populations, Feis 511.
 parasites, infestation, mortality, Ovis 7631.
- Ctenocephalides felis,**
 biological control, infection, mortality, *Neoplectana carapacae* 6612.

- Ctenocephalides felis**, (continued)
development, survival, environmental effects 359
parasites, feral populations, *Felis* 511.
parasites, range extension, *Mammalia*, USA, Alaska 4743
- Ctenocephalides felis orientis**,
biometrics, infestation, cattle, India 8427
- Ctenolepisma verayui**,
feeding, aluminum 5916
- Ctenopseustis obliquana**,
abundance, pest control, crop fields, *Fragaria vesca* 3816
- Ctenostegus murrumbidgee**,
prey 2146
- Ctenuchidae**,
surveys, attraction, host plants, *Heliotropium*, Kenya 5962.
- Cuba**,
biometrics, taxonomy, biogeography, economic importance, *Saissetia hemisphaerica* 5955
Chironanthobius darlingtoni, taxonomy, new species, morphology 1606.
keys, morphology, *Culex* 8887
new species, *Chaetophloeus cubensis* 806
new species, morphology, taxonomy, *Alienates mullis* 2433
new species, new records, host plants, *Agromyzidae* 8784
new species, taxonomy, house dust, *Dermatophagoides siboney* 3970
new species, taxonomy, morphology, *Androlaelaps capromydis*, *Ornithonyssus garndti* 8720
new species, taxonomy, morphology, *Cydia largo* 7224
new species, taxonomy, morphology, *Drymosa amarsi*, *Drymosa spectata* 8732
parasites, predators, fungi infection, *Saissetia hemisphaerica* 9010
taxonomy, morphology, *Tmatoma* 5536
- Cabhermes fungifaber**,
fat body, ultrastructure, sexual dimorphism 4161.
- Cuculotogaster heterogrammicus**,
biometrics, morphology, parasites, *Phasianidae*, Spain, Cordoba 8045.
- Cuculotogaster heterographus**,
biometrics, morphology, parasites, *Phasianidae*, Spain, Cordoba 8045
parasites, morphology, biometrics, *Alectoris rufa* 8050
- Cuculus claviger**,
functional morphology, mandibles, feeding behavior, larvae 4357.
- Cucumber mosaic virus**,
disease transmission, vectors, *Aphis gossypii*, *Myzus persicae*, Israel 7657.
- Cucumis melo**,
yield, pollination effects on, *Apis mellifera* 2186.
- Cucumis sativus**,
oviposition, substrate preferences, *Diaphania nitidalis*, *Diaphania hyalinata* 5112.
pest control, biological control effects on, *Chermes climacodes*, *Phytoseiulus persimilis* 1265.
- Cucurbita**,
host plants, rearing methodology, *Pseudaulacaspis pentagona* 1693.
pest control, chemical control, crop fields, *Dacus cucurbitae* 7788.
- Cucurbita maxima**,
leaf-curl, disease transmission, vectors, *Bemisia tabaci* 7656
- Cucurbita pepo**,
crop yield, pest control effects on, *Insecta* 4567.
pollination efficiency, *Apis mellifera*, *Peponapis pruinosa* 6797
- Cucurbitaceae**,
food plants, food preferences, effects on development, fecundity, *Aulacophora foveicollis*, *Aulacophora atripennis* 9167.
- Cuicoides variipennis**,
hosts, sex ratio, parasitism, *Heleidomeris vivipara* 6024.
- Culex**,
biological control, pathogenicity, *Bacillus thuringiensis* 6602.
breeding sites, surveys, septic tanks, Malaysia 9261.
experimental infection, *Ganjam virus* 7385.
host preferences, disease transmission vectors, USA, Iowa 1198
larvae, biological control, predators, *Gambusia affinis* 617.
predators, biological control, vectors, disease transmission 2861.
- Culex annulirostris**,
arboviruses transmission, Australia 3698
disease reservoirs, geographical distribution, Australia, Ord R. 671.
- Culex bitaeniorhynchus**,
vectors, disease transmission, Japanese encephalitis virus, India 2937.
- Culex fatigans**,
food organisms, food preferences, *Toxorhynchites theobaldi* 494
larvicides, toxicity, plant extracts, neem oil, *Azadirachta indica* 7396.
pathogenicity, temperature effects, *Bacillus sphaericus* 2638
toxicity, biocides, alkyl phenyl (dichloromethyl) phosphonates 1053.
- Culex horridus**,
disease transmission, *Chikungunya virus* 1380.
- Culex hortensis**,
larvae, sensitivity, pesticides (organophosphorus), abate, fenitrothion, malathion 8192.
- Culex mollis**,
biological control, pathogens, *Bacillus thuringiensis* 630.
- Culex nigripalpus**,
biological control, larvae, *Bacillus sphaericus* 6601.
disease transmission vectors, *potyvirus* 3697.
malaria transmission, susceptibility, USA, Florida 1320.
perovus state, ovary, aging methods 855
pest control, efficacy, isosteryl alcohol surface films 8415.
population density, seasonal variations, ponds, wastewater treatment, USA, Florida, Indian River Co. 6045.
- Culex peus**,
pest control, efficacy, polluted environments, ponds, *Bacillus thuringiensis israelensis* 8402.
- Culex pipiens**,
chemical control, larvae, herbicides, malathion 1038.
chemical control, pesticides, toxicity 1832.
chemical control, pyrethroids, susceptibility, developmental stages 310.
development, sex ratio, toxicants, growth regulators effects on 1042.
developmental stages, populations, susceptibility, infection, parasites, *Komanemermis culicivora* 1438.
flight activity, abundance, diurnal variations, traps 7617.
geographical distribution, population dynamics, control, Africa 1316.
growth regulators, effects on, reproduction, morphometry, females 360.
host preferences, USA, Iowa 1198.
- Culex pipiens**, (continued)
instars, toxicity tests, mortality, *Bacillus sphaericus* 1842.
larvae, sensitivity, pesticides (organophosphorus), abate, fenitrothion, malathion 8192.
larvae survival, breeding sites effects on 618
larvae susceptibility, pathogens, disease transmission biological control, *Metarhizium anisopliae* 654.
mutants, sex linkage, gene mapping 7046
parasitism, pathology, infection, *Xenorhabdus luminescens*, *Pseudomonas aeruginosa*, *Heterorhabdus bacteriophora* 5728
parasitism, pathology, synergism, *Xenorhabdus luminescens*, *Heterorhabdus bacteriophora* 4203.
pest control, efficacy, polluted environments, ponds, *Bacillus thuringiensis israelensis* 8402.
pest control, pathogenicity, environmental effects, *Bacillus thuringiensis* 8996
pest control, toxicity testing, methodology, *Bacillus thuringiensis israelensis* 6119.
pesticide resistance, genetic control, enzymatic activity 3919.
pesticide resistance, malathion, migrations effects on 319.
pollution effects, pesticides, uptake 4219.
toxicity, herbicides, dinoseb-acetate, effects on, developmental stages 682.
vectors, disease transmission, sanitation, tropical environment 1356.
vectors, transmission (transovarial), St. Louis encephalitis virus 634.
viruses, pathogens, isolation, mutation heritability, India, Aligarh 3904
water temperature, effects on oviposition 5081.
- Culex pipiens fatigans**,
chemical control, insecticides, decamethrin 5350.
histopathology, oogenesis, pest control, insecticides, *tepa* 1835.
mating, pairing, rearing methodology 8853.
new records, infection, *Simulium parasites*, *Gastromermis* 4209.
new records, mutants, mutation heritability, India, Aligarh 3904
oogenesis, enzymatic activity, alkaline phosphatase 1886.
parasites, infectivity, development, *Gastromermis* 5740.
- Culex pipiens molestus**,
oviposition, attractancy, amino acids 8966.
- Culex pipiens pallens**,
hosts, vectors, *Breintlia sergenti*, China, People's Rep., Yunnan Province 5288.
insecticides, analogues, toxicity 4230
mutants, eyes color, heritability 4685.
oogenesis, diets effects on, proteins 5819.
- Culex pipiens pipiens**,
insecticides, permethrin, malathion, toxicity testing 3438.
pesticides (organophosphorus), toxicity 9027
virulence, pathogenicity, geographical variations, *Metarhizium anisopliae* 8161.
- Culex pipiens quinquefasciatus**,
biological control, toxicity, larvae, *Bacillus sphaericus* 6600.
chemotaxis, nucleotides, larvae 7334.
flight activity, circadian rhythms, photoperiod 8279.
new records, disease transmission, Ross River virus 7632.
- Culex pipiens pallens**,
juvenile hormones activity, synthesis 2581.
- Culex poicilipes**,
parasites, first record, *Mermithidae*, Angola 1271.
- Culex portesi**,
Guiana virus isolation, Surinam 3427.
- Culex pseudovishnui**,
vectors, disease transmission, Japanese encephalitis virus, India 2937.
- Culex quinque fasciatus**,
mortality, pathogenicity, *Bacillus thuringiensis* 3422.
- Culex quinquefasciatus**,
cell lines, B-N-acetylglucosaminidase secretion, enzymatic activity 96.
Culex quinquefasciatus,
biological control, larvae, toxins effects on, *Chlorella ellipsoidea* 1353.
biological control, pathogens, *Bacillus thuringiensis* 630.
biological control, pathogens, *Bacillus thuringiensis*, serotype H-14 6159.
biological control, pathogens, feeding behavior, effects on mortality 1382.
biological control, predators, *Toxorhynchites rutilus* 4579.
biological control, water pollution, effects on infection, *Legidium giganteum* 4513
biting cycles, blood meals, Thailand, Bangkok 6060.
chemical control, aerosols, insecticides, permethrin, pyrethrin, resmethrin 6093.
control programs, juvenile hormones, methoprene, effects on emergence 1360.
DDT, effects on body size, fecundity, survival 5770.
disease transmission, *Chikungunya virus* 1380
infectivity, pathogens, *Microsporidia* 8127.
oviposition, diurnal variations 3525
oviposition, repellents, fatty acids 5859.
pest control, efficacy, isosteryl alcohol surface films 8415.
pest control, genetic control, cytoplasmic male sterility, translocation 6287.
population density, seasonal variations, ponds, wastewater treatment, USA, Florida, Indian River Co. 6045
sexual behavior, oviposition, diel variations, photoperiods, circadian rhythms 1153
toxicity, biological control, *Bacillus sphaericus* 6603.
toxicity, insecticides, bendiocarb, pirimiphosphethyl 3442.
vectors, disease transmission, sanitation, tropical environment 1356.
- Culex restuans**,
host preferences, USA, Iowa 1198.
- Culex salinarius**,
host preferences, USA, Iowa 1198.
host searching behavior, hibernation physiology, seasonal variations 660.
instars, toxicity tests, mortality, *Bacillus sphaericus* 1842
malaria transmission, susceptibility, USA, Florida 1320.
pests, habitat, population studies, USA, New Jersey Coast 6054
toxicity, growth regulators, MV678, brackishwater environment 6618
- Culex simpsoni**,
parasites, first record, *Mermithidae*, Angola 1271.
- Culex sitiens**,
biological control, field trials, *Bacillus thuringiensis israelensis*, Fiji 6150.
life history, rearing 466
oviposition, diurnal variations 3525
pesticides (organochlorine), pesticides (organophosphorus), susceptibility, Singapore 5766.
- Culex taeniopus**,
disease transmission, Venezuelan equine encephalitis virus 9001.
vectors, Venezuelan equine encephalitis virus, pathogens dose 3400

- Culex tarsalis**,
blood meals, feeding, diapause, overwintering 3570.
capture-recapture studies, autogeny, blood meals, feeding, oviposition 6745
isozymes, acetylcholinesterase, biochemical analysis, distribution 189
larvae, pathology, fat body infection, *Amblyospora californica* 283.
mating behavior, males, competition, fecundity, radiation effects on 1125.
midgut, epithelium, cells, response, blood meals, digestion 6547.
oviposition, repellents, fatty acids 5859.
pathology, infection. *Ankilapora californica* 2629.
postparasites, *Romanomeris culicivora*, control, larvae 2168.
- Culex terricola**,
abundance, surveys, Yugoslavia 3939.
- Culex theileri**,
species richness, abundance, breeding sites, females, South Africa, Orange Free State 5282.
- Culex tritaenialis**,
new species, taxonomy, morphology, China, People's Rep., Tianpingshan 2423.
- Culex tritaeniorhynchus**,
susceptibility, variability, geographical distribution effects on, Japanese encephalitis virus 273.
- Culex tritaeniorhynchus**,
isolation, Japanese encephalitis virus, Gethai virus 1348.
oviposition, diurnal variations 3525.
vectors, disease transmission, Japanese encephalitis virus, India 2937.
- Culex vihanui**,
chromosomes, salivary gland, characterization 1518.
medical importance, vectors, Gethai virus, Philippines 1378.
- Culicidae**,
abdomen, motor activity, peristalsis, circulation, ventilation 5661.
abundance, ecological distribution, pest control, salt marshes, inland water environment, USA, Virginia 8610.
activity patterns, periodicity, Brazil 4498.
age determination methodology, ovary, development 8849.
biological control, control programs, review 643.
biological control, pathogenesis, *Bacillus thuringiensis* 6602.
biological control, pathogens, *Bacillus thuringiensis* 630.
biological control, pathogens, conferences 7128.
biological control, pathogens, feeding behavior, effects on mortality 1382.
biological control, pathogens susceptibility, *Bacillus thuringiensis israeliensis* 7651.
biological control, pools, *Dugesia tigrina*, USA, North Carolina 2927.
blood meals, estradiol binding, aging methods, hosts, *Rodentia* 6888.
blood meals, hormones, vitellogenesis 5083.
blood meals, identification, enzyme-linked immunosorbent assay 3662.
breeding, abundance, agricultural practices effects on, paddy fields, USA, Louisiana 2920.
breeding sites, storm water drainage systems, USA, New Jersey 2918.
coexistence, pools habitat, streams, *Dytiscidae*, USA, Arizona, Dry Creek 9372.
community composition, water management effects on, Czechoslovakia, Moravia 7016.
control programs, habitat alterations, salt marshes, USA, Georgia, Glynn Co 1437.
development, survival, aquatic environment, environmental effects, toxins.
Chlorella ellipsoidea 6691.
developmental stages, separation techniques, methodology 69.
disease transmission vectors, aging methods 4493.
disease transmission vectors, biological control, parasites, *Mermithidae* 3661.
diseases, malaria, epidemiology, *Spheniscus demersus* 1377.
eggs, oviposition, epidemiology 1373.
flight activity, abundance, diurnal variations, traps 7617.
geographical distribution, Niger 628.
geographical distribution, surveys, India, Assam 782.
Guama virus isolation, Surinam 3427.
hematophagy, blood meals, hosts, *Mammalia*, Australia, Northern Territory 3678.
immobilization, methodology, equipment 7255.
infection, biochemical characteristics, larvae, *Legidium giganteum* 7372.
infection, *Dirofilaria immitis*, *Aedes triseriatus*, *Aedes vexans* 9270.
isozymes, biochemical characteristics, analysis methodology 8012.
Japanese encephalitis virus isolation, infection, Japan 6614.
keys, morphology, Cuba 8887.
larvae, biological control, predators, *Gambusia affinis* 617.
larvae, ecological distribution, USA, Ohio 1951.
larvae, pathogenicity, assays, standardization, *Bacillus thuringiensis* 8995.
light traps protection, methodology, USA, California 859.
malaria transmission, susceptibility, USA, Florida 1320.
malaria vectors, control programs, reviews 8409.
mating behavior, *Anopheles stephensi* 9073.
molting hormones, ecdysones, analogs, biological activity 5003.
ovogenesis, blood meals 9059.
oviposition, diurnal variations 3525.
parasites development, *Plasmodium* 2625.
parasites, first record, *Mermithidae*, *Coelomonemes africanus*, Angola 1271.
parasites infectivity, salinity effects, *Nematoda* 266.
parasites, transport methodology, *Romanomeris culicivora* 4078.
pathogenicity, larvae, fungi 7367.
pathogenicity, pest control, *Bacillus thuringiensis* 8997.
pathogenicity, toxicity, *Bacillus thuringiensis* 6599.
pathogenicity, varieties, *Bacillus thuringiensis* 2639.
pathogens, *Plasmodium berghei* *berghii*, *Anopheles atroparvus* 9015.
pest control, biological control, toxicity, *Bacillus thuringiensis* 9012.
pest control, pathogenicity, formulations, *Bacillus thuringiensis israeliensis* 7671.
pest control, pesticide applications, equipment 2481.
pest control, pesticide applications, equipment, aquatic environment 8848.
pest control, toxicity, juvenile hormones analogs, *Aedes* 7739.
pest control, water management, reservoirs, USA, Tennessee 2935.
pesticide resistance evolution, control programs, population genetics 5501.
pesticides, profenofos, effects on biological activity 5775.
pests, disease transmission, literature review 1350.
phenology, bionomics, *Culiseta morsitans*, USA, California 9221.
population studies, mortality, survival, mathematical analysis 4090.
salt marshes, control programs, efficiency, quantitation, methodology 1351.
seasonal variations, abundance, spatial distribution, females, South Africa, Orange Free State 5284.
sensilla, anatomy, morphology, reviews 8921.
species composition, breeding, population density, USSR, Baikal 9220.
species composition, geographical distribution, USSR 9460.
- Culicidae, (continued)**
species composition, islands, USSR Coast 9489.
surveys, geographical distribution, disease reservoirs, Australia, Ord R. 671.
surveys, species composition, Yugoslavia 3939.
trapping, methodology, efficacy 8860.
vectors, malaria, disease control, inhibition, fertilization, gametes, *Plasmodium gallinaceum* 4483.
vitellogenesis, role, ecdysone 3499.
- Culicoides**,
pathogens, infectivity, temperature effects, *Anopheles hilli* 1039.
- Culicoides**,
abundance, seasonal variations, mangrove swamps, USA, Florida 4419.
abundance, species composition, blue-tongue virus isolation, Zimbabwe, Mukwadzi Valley 9228.
biological control, pathogens, *Bacillus thuringiensis* 2218.
check lists, Sri Lanka 2413.
feeding, blood meals, methodology, equipment 3242.
morphometry, body size, allometry 2506.
new records, geographical distribution, Israel 9480.
new species, morphology, Colombia 812.
new species, taxonomy, keys, Panama 3205.
species diversity, seasonal variations, Zimbabwe 1997.
taxonomy, synonymy, Israel 8797.
viruses, pathogens, isolation, Israel 3690.
- Culicoides amelae**,
new species, morphology, Colombia 812.
- Culicoides annuliductus**,
new species, morphology, taxonomy, Panama 3205.
- Culicoides atelis**,
new species, taxonomy, morphology, South America 4844.
- Culicoides barboasi**,
abundance, seasonal variations, mangrove swamps, USA, Florida 4419.
vectors, disease transmission, *Mansonellia*, Haiti 4516.
- Culicoides bayano**,
new species, morphology, taxonomy, Panama 3205.
- Culicoides brucei**,
blood meals, host preferences, Zimbabwe 1997.
- Culicoides caldasi**,
new species, morphology, Colombia 812.
- Culicoides crepuscularis**,
seasonal variations, diel activity, flight activity, USA, Colorado 442.
- Culicoides cubensis**,
new species, taxonomy, morphology, South America 4844.
- Culicoides fliductus**,
new species, morphology, taxonomy, Panama 3205.
- Culicoides flinti**,
new species, taxonomy, morphology, South America 4844.
- Culicoides borealis**,
males, morphology, Colombia 812.
- Culicoides fukienensis**,
breeding sites, China, People's Rep. 1575.
- Culicoides fulvithorax**,
blood meals, host preferences, Zimbabwe 1997.
- Culicoides furens**,
abundance, seasonal variations, mangrove swamps, USA, Florida 4419.
vectors, disease transmission, *Mansonellia*, Haiti 4516.
vectors, *Mansonella ozzardi*, Haiti 656.
- Culicoides hieroglyphicus**,
seasonal variations, diel activity, flight activity, USA, Colorado 442.
- Culicoides holoserica**,
feeding behavior, developmental stages 2009.
- Culicoides homotomus**,
morphology, immature stages, China, People's Rep., Szechuan Province 2502.
- Culicoides imicola**,
blood meals, host preferences, Zimbabwe 1997.
viruses, pathogens, isolation, Israel 3690.
- Culicoides krombeini**,
new species, taxonomy, morphology, Sri Lanka 2413.
- Culicoides magnus**,
blood meals, host preferences, Zimbabwe 1997.
- Culicoides melles**,
feeding behavior, developmental stages 2009.
- Culicoides miharai**,
activity patterns, China, People's Rep. 1575.
- Culicoides mihensis**,
synonymy, *Culicoides moristai* 1575.
- Culicoides milnei**,
blood meals, host preferences, Zimbabwe 1997.
- Culicoides moristai**,
synonymy, *Culicoides mihensis* 1575.
- Culicoides nubeculosus**,
chemical control, sterilization, thiolepa, pupae 1355.
karyotypes, feeding 9411.
- Culicoides paboi**,
new species, morphology, Colombia 812.
- Culicoides palmerae**,
seasonal variations, diel activity, flight activity, USA, Colorado 442.
- Culicoides pancensis**,
new species, morphology, Colombia 812.
- Culicoides pichindensis**,
new species, morphology, Colombia 812.
- Culicoides pseudoinaricus**,
new species, morphology, China, People's Rep. 1575.
- Culicoides puncticollis**,
infection, pathogen 3413.
- Culicoides pycnostictus**,
blood meals, host preferences, Zimbabwe 1997.
- Culicoides riethi**,
karyotypes, feeding 9411.
- Culicoides santanderi**,
new species, morphology, Colombia 812.
- Culicoides schramae**,
new species, taxonomy, morphology, Sri Lanka 2413.
- Culicoides schultzei**,
viruses, pathogens, isolation, Israel 3690.

- Culicoides simulator**, diets, fertility, USSR, Abakan 9197.
- Culicoides tianmushanensis**, new species, morphology, China, People's Rep. 1575.
- Culicoides varipennis**, chemical control, ozone fumigation, biological safety cabinets, bluetongue virus vectors 8477, flight, range, disease transmission 2103, marking, dyes, pigments 853, parasites, transmission, vectors, *Mansonella ozzardi* 3399, pest control, fumigation, ozone, vectors, bluetongue virus 4519, population studies, swarming, mating behavior, USA, Virginia 5106, predation, feeding behavior, *Cordilura varipes*, USA, Virginia 6041, seasonal variations, diel activity, flight activity, USA, Colorado 442, vectors, bluetongue virus, disease control 4510.
- Culicoides varipennis varipennis**, population structure, aging methods, methodology, oogenesis 4081.
- Culicoides zuluensis**, blood meals, host preferences, Zimbabwe 1997.
- Culiseta inornata**, food intake, control, mechanoreceptors 3312, population-environment relations, habitat, phenology, bionomics, USA, California 9221, sensilla, anatomy, morphology, reviews 8921.
- Culiseta melanura**, habitat selection, breeding sites, emergence, water levels, USA, New York, Toad Harbor Swamp 6875, light traps, CDC trap, bait, hosts 5620, range extension, new records, geographical distribution, Canada, Newfoundland 6331.
- Culiseta moritana**, habitat selection, breeding sites, emergence, water levels, USA, New York, Toad Harbor Swamp 6875.
- Cultivars**, *Brassica campestris*, *Brassica napus*, diets, larvae, *Entomoscilus americana* 2076, *Brassica oleracea*, pest control, insecticides, *Bacillus thuringiensis*, *Triphoplia n. piers* rapae, *Plutella xylostella* 1834, chemical composition, pests effects on, *Empoasca fabae*, *Medicago sativa* 731, host plants resistance, pest control, *Medicago sativa*, *Acyrtosiphon kondoi*, *Acyrtosiphon pisum* 3801, infestation susceptibility, pests, *Brassica napus*, *Dasieneura brassicae* 9308, *Lausca*, infestation, *Macrosetis fascifrons*, pest control, aluminum mulches 2253, legumes, infestation, *Empoasca flavescens* 2518, pest resistance, effects on larvae growth, *Fidhorimaea operculella*, *Solanum tuberosum* 539, pest resistance, *Insecta*, *Glycine max* 6942, pest resistance, *Insecta*, *Vigna unguiculata* 8522, pest resistance, *Lissorhoptrus oryzophilus*, *Oryza sativa* 6129, pest resistance, *Phaseolus vulgaris*, *Zabrotes subfasciatus* 8578, pest resistance, *Solanum*, *Myzus persicae* 4633, pest resistance, *Sorghum*, *Atherigona soccata* 4565, pest resistance, *Triticum*, *Sitobion avenae*, *Metopolophium* 8567, pests susceptibility, genetic factors, *Poa pratensis*, *Sphenophorus parvulus* 537, resistance, pests, *Vigna unguiculata*, *Lygus lineolaris*, *Anticarsia*, gemmatilis, *Nezara viridula*, *Chalcodermus aeneus*, *Aphis* 4614.
- Cultivation**, *Basidiomycetes*, spatial distribution, larvae, *Lycoriella agarici*, Australia, New South Wales 2966, mass rearing, technical entomology, *Insecta* 7258, mushrooms, pests, population growth, composts, *Lycoriella mali* 6172.
- Cultural characteristics**, man, disease transmission, control programs, African trypanosomiasis, *Glossina*, Africa, East 1341.
- Cultural control**, integrated control, *Chilo partellus* 3033.
- Culture**, *Basidiomycetes*, vectors, disease transmission, *Verticillium fungicola*, *Megaselia halterata* 5394, biological control, pathogens, culture methodology, environmental conditions, *Verticillium lecanii* 4920, cells, bioassays, toxicity, δ -endotoxin, *Bacillus thuringiensis*, *Choristoneura fumiferana* 879, dark, effects on eye ultrastructure, *Drosophila melanogaster* 131, digestive tract symbionts, procaroties, *Lolita grandis* 2808, effects on larvae survival, development, *Ostrinia nubilalis* 3485, egg production, sex ratio, stocking rates effects on, *Anopheles albimanus* 387, reproductive behavior, fecundity, longevity, *Toxorhynchites amboinensis* 439.
- Culture collections**, parasites, chemical control, sulphonamides, *Malameba locustae*, *Acrididae* 1002.
- Culture media**, ethidium bromide, effects on, development, aging, *Drosophila melanogaster* 353.
- Culture systems**, chambers, *Insecta* 3249, feeding methodology, infection, *Trypanosoma*, *Glossina* 6476, rearing, colonization, vectors, *Oeciacus vicarius* 3692.
- Cummingsiella longistricola**, parasites, *Numenius americanus*, USA, New Mexico 3581.
- Cuneoceph**, new genera, *Mascarenes* 4864.
- Cuneoceph insularis**, new species, *Mascarenes* 4864.
- Cunninghamella echinulata**, digestive tract symbionts, cellulose digestion, *Odontotermes obsesus* 4364.
- Cupido minimus**, new records, geographical distribution, Iberian Peninsula 7078.
- Cuplennius saei**, communication, leaves vibrations, oscillation 3542, mechanoreceptors, lyform slit sense organs, transfer, electrophysiological recording 4129.
- Curculio caryae**, biological control pathogens, fungicides effects on, *Beauveria bassiana*, *Metarrhizium anisopliae* 1402, damage, crop production, economic analysis, *Carya pecan* 2265, longevity, adults 456, pests, damage, orchards, *Carya illinoensis* 2221.
- Curculio elephas**, pests, reproduction, population growth, Hungary 7703.
- Curculionidae**, diseases, *Pinus strobus*, resistance, growth, *Pinus strobus* 1393, evolution, phylogeny, Eurasia 6292, new records, geographical distribution, check lists, Spain, Teruel, Morade Rubielos 5518, preyl, urban environments, *Erinaceus concolor*, Czechoslovakia, Brno 5987, soil fauna, autecology, species composition, Asia 8599, taxonomy, keys, Ogasawara Is. 3979.
- Curculioninae**, taxonomic revision, Japan 1599.
- Curtara**, new species, taxonomy, morphology, South America 7984, 28 new species, taxonomy, morphology, South America, Central America 7200.
- Curvitermes strictus**, defense secretions, chemical composition 1797.
- Cuscuta**, infestation, phenology, *Smicronyx*, Pakistan 9157.
- Cuterebra**, infestation, man, case reports 4507.
- Cuterebra emaculator**, parasites, effects on hosts, castration 6778.
- Cuterebra fontinella**, parasites, effects on hosts, castration 6778, parasites, migration, hosts tissues, *Peromyscus leucopus* 2832.
- Cuterebra lepvora**, males, aggregation behavior, territorial behavior, USA, California 582.
- Cuterebridae**, parasites, life history, biology, reviews 5912.
- Cuticle**, abdomen, biochemical analysis, proteins, chitin, *Locusta migratoria* 2515, abdomen, lesions, new records, *Glossina* 5659, antenna, development, larvae, *Tenebrio molitor* 9043, deposition, integument, *Periplaneta americana* 4953, electrical properties, temperature effects, diets, thermoregulation, *Vespa orientalis* 3272, electrical properties, temperature effects, *Vespa orientalis* 4118, embryology, differentiation, tissues, *Drosophila melanogaster* 1093, excretions, *Oniscus asellus*, molting, developmental stages, *Oniscus asellus* 4273, growth, age, *Drosophila melanogaster*, *Drosophila pseudoobscura* 8018, growth synchronizaton, molting rhythms, *Blaberus fuscus* 8899, head, light penetration, *Megoura viciae* 2533, hydrocarbons, attractants, bioassays, *Musca autumnalis* 1780, hydrocarbons, *Cylindrotus laevicostriatus*, *Phyllon gibbus* 1730, hydrocarbons transport, hemolymph, *Periplaneta americana* 7307, infection, *Apanteles glomeratus* parasitism effects on *Beauveria bassiana* pathogenicity, *Pieris brassicae* 8132, larvae, proteins, biochemical analysis, cross-linking, *Sarcophaga bullata* 884, lesions, abdomen, *Glossina*, Kenya 4119, lesions, histopathology, *Glossina pallidipes*, *Glossina brevipalpis*, *Glossina austeni* 8163, lesions, histopathology, infectivity, *Glossina morsitans morsitans* 8162, lipids, chemical composition, function, *Arthropoda* 883, lipids, chemical composition, *Melanoplus* 1729, lipids, mating behavior deterrents, *Glossina morsitans morsitans* 8260, lipids, metabolism, insecticides, dieldrin, *Calliphora erythrocephala* 5799, molting, hormones interaction effects on, *Manduca sexta* 3493, molting, physical properties, hormones effects on, *Schistocerca gregaria* 2517, morphogenesis, larvae, growth, *Manduca sexta* 3518, penetration mechanisms, infection, *Paeclomyces farinosus* 9003, permeability, salinity effects, osmoregulation, *Cenocrota bifida* hungerfordi 978, permeability, water loss, *Lycosa howarthi*, USA, Hawaii 2607, phenols incorporation, diets, *Anacidium melanorhodon* 7284, pheromones degradation, enzymatic activity, *Trichoplusia ni* 4169, physical properties, mechanical properties, *Locusta migratoria* 7283, pigmentation, corpora allata control, *Chrysocoris stollis* 8898, pigments, photoconduction, xanthines, colchicine, *Vespa orientalis* 4948, polarity, genetics, mutants, *Drosophila melanogaster* 6271, proteins, biochemical analysis, developmental stages, *Locusta migratoria migratorius* 4120, proteins, gene expression, development, *Drosophila melanogaster* 3911, sclerotization, biochemical characteristics, *Locusta migratoria* 6520, segments membranes, ultrastructure, morphology, *Locusta migratoria migratorius* 3271, structure, function, reviews, *Ixodidae*, *Aargasidae*, *Nuttallielidae* 5658, synthesis, makisterone A effects on, *Oncomelanus fasciatus* 3487, thermoregulation, ecophysiology, *Sarcophaga* 6580, ultrastructure, lipid composition, *Latrodectus hesperus* 3273.
- Cuticles**, abdomen, chemical composition, resilin, *Myrmecocystus mexicanus* 110, chemical composition, organic compounds, *Hymenoptera*, USA, Colorado 107, chemical composition, organic compounds, lipid, *Diaperomera femorata* 109, chemical composition, organic compounds, sex differences, *Musca domestica* 108, metabolism, amino acids, aromatic compounds, *Insecta* 171.
- Cyanopis tetragnathus**, host plants, infestation, population dynamics, life cycle, *Empoasca kerri*, Pakistan 9161.
- Cyanamid AC-222,705**, insecticides, aerosols, evaluation, wind tunnels, *Anopheles quadrimaculatus*, *Psorophora columbiae* 6203.
- Cyanide**, hemoglobin, heterogeneity, electrophoresis, *Chironomus thummi* 920, leaves, feeding behavior deterrents, *Prunus persica*, *Choristoneura rosaceana* 8501.
- Cyaniris semiargus**, new records, geographical distribution, Spain 7076.
- Cyanocephalus**, effects on lipid composition, silk gland, *Bombyx mori* 6588, effects on silk gland glycogen, *Bombyx mori* 6585.
- Cybocephalus micans**, predators, temperature, effects on development, sexual reproduction, longevity 7505.

- Cybocephalus nigriceps**,
predators, temperature, effects on development, sexual reproduction, longevity 7505
- Cybocephalus subulcidus**,
synonymy, taxonomic revision, *Brachypterus subulcidus* 8759
- Cycas formicarius elegantulus**,
abundance, diurnal variations, *Ipomoea batatas* crop fields 4535
- Cycles**,
biting, blood meals, *Culex quinquefasciatus*, Thailand, Bangkok 6060
population density, host-parasite interactions, *Diatraea*, *Trichopria zebensis*,
Paratheresa clarpalpis, Trinidad 5986
reproduction, regulation, photoperiod, temperature, *Armadiidulum vulgare* 7446
sexual reproduction, biometrics, *Anopheles darlingi*, Brazil 7527
- Cyclic AMP**,
activity, regulation, *Drosophila melanogaster* 8948
brain, biochemistry, metamorphosis effects on, *Mamestra configurata* 960
embryos, cell lines, ecdysterone effects on 2571
midgut epithelium, L-canavanine effects on, host plants, defense mechanisms,
Manduca sexta 4391
- Cyclic GMP**,
embryos, cell lines, ecdysterone effects on, *Drosophila melanogaster* 2571
levels, development, *Tribolium castaneum* 9057
midgut epithelium, L-canavanine effects on, host plants, defense mechanisms,
Manduca sexta 4391
- Cyclic nucleotides**,
protein kinase, epidermis, molting, *Melanoplus sanguinipes* 6518
- 3',5'-Cyclic-AMP phosphodiesterase**,
distribution, tissues, cell membranes, *Locusta migratoria* 181
- Cyclocephala**,
overwintering temperature tolerance, emergence, environmental effects 1971
- Cyclocephala borealis**,
overwintering temperature tolerance, emergence, environmental effects 1971
- Cyclocephala innaculata**,
larvae feeding effects on yield, *Poa pratensis* 3773
overwintering temperature tolerance, emergence, environmental effects 1971
- Cyclochila australasiae**,
sound production (biological), muscles, action potential 264
- Cyloheximide**,
drug effects, avoidance learning, retention, *Periplaneta americana* 3548
effects on RNA biosynthesis, *Anopheles albimanus* 6273
effects on transcription, RNA biosynthesis, salivary gland, *Chironomus thummi*
5019
toxicity developmental stages, *Drosophila melanogaster* 8196
- Cycloneda polita**,
larvae, foraging behavior, predatory behavior 2869
- Cyclophora albipunctata subroseata**,
morphology, inheritance, population genetics, British Isles 4690
- Cycloprate**,
ovicides, bioassays, acaricides, *Panonychus ulmi*, *Panonychus citri*, *Tetranychus*
urticae, *Tetranychus kanzawai*, *Tetranychus desertorum* 7398
- Cyrtobagha**,
ontogeny, nutrition, effects on, development, mouthparts 381
species composition, population dynamics, seasonal variations, forests,
Czechoslovakia 7101
- Cyclotus caroli**,
avoidance behavior, defensive behavior, predators 9117
- Cycnia tenera**,
defensive behavior, vocalization, predators, Chiroptera 5914
- Cydia critica**,
pests, crop fields, *Cajanus cajan* 4553
- Cydia hemidoxa**,
pests, host plants, *Piper nigrum*, India, Kerala 6946
- Cydia largei**,
new species, taxonomy, morphology 7224
- Cydia nigricana**,
attractants, population levels monitoring 3022
larvae mortality, pathology, granulosis virus 272
pest control, synthetic sex pheromone, dose 696
population studies, pheromone traps, attractants 2492
- Cydia pomonella**,
control programs, sterile-release, orchards, Canada, British Columbia 3815
developmental stages, morphology 3253
diets, effects on, longevity, fecundity, fertility, mating 2765
fecundity, pathogens infection effects on, *Nosema carpocapsae* 2632
females, sex pheromone, biochemical analysis, chemical composition 2600
host searching behavior, host plants, temperature effects on, survival 8277
hosts, pathogens life cycle, *Nosema carpocapsae* 2633
larvae mortality, pathology, granulosis virus 272
methoprene effects on fecundity, fertility 8236
natural enemies, effects on population levels, British Isles 8397
pheromone traps, factors affecting efficacy, pest control 5347
- Cydia pychiora**,
life history, developmental stages, morphology 434
pests, host plants infestation, *Arachis hypogaea*, India 6948
population dynamics, population regulation 8381
- Cydnidae**,
overwintering behavior, ecological distribution, USA, South Carolina 455
- Cyhexatio**,
insecticides, effects on webs spinning, *Tetranychus cinnabarinus* 1048
pest control, *Panonychus ulmi* 9300
- Cylas formicarius**,
larvae, metabolites, characterization, effects on host plants 951
pests, host plants resistance, *Ipomoea batatas* 1233
- Cylas formicarius elegantulus**,
pest resistance, host plants, *Ipomoea batatas* 6916
temperature effects, development, longevity, crowding, mating behavior, effects
on, fecundity 1876
- Cyllista chionox**,
new species, taxonomy, morphology, Brazil 8758
- Cylindrinotus laevioctostriatus**,
cuticle, hydrocarbons 1730
- Cylindrocyrtus adspersus**,
infestation, charcoal rot detection, *Helianthus annuus* 8318
overwintering, emergence, mortality, crop fields 5896
sex determination, identification, morphology 1706
- Cylindroiulus teutonius**,
pests, buildings, Czechoslovakia, Prague 592
- Cylindroiulus londinensis**,
habitat preference, activity patterns, development, German Dem. Rep., Thuringia
7588
- Cylindrosperrum**,
feeding behavior, larvae, *Pinus truncatula* 2779
- Cymatita nigra**,
new genera, Cnethocymatita, Australia 4748
- Cynaues angustus**,
stored products pests detection, traps 3783
- Cynipidae**,
parasitoids, incidence, *Ceratitis capitata*, *Anastrepha*, Costa Rica 2818
- Cynodon dactylon**,
forage production, environmental impact, coprophilous organisms, *Geotrupes* 1252
pesticide residues, insecticides, methomyl 5416
- Cynthia cardui**,
pests, defoliation, crop yield, *Glycine max* 3781
- Cypermethrin**,
antifeedants, pest control, *Pieris brassicae* 3032
insecticides, chemical control, *Heliothis armiger*, *Diparopsis castanea*, *Earias*
5389
insecticides, topical applications, penetration, metabolism, *Wiseana cervinata*
5787
repellents, efficacy, *Simulium* 313
- Cyperus rotundus**,
plant extracts, insecticides, toxicity, *Bagrada crucifera* 6625
- Cyphodorus javanus**,
reproduction, fecundity, diets effects on 5090
- Cyphophragmatitella**,
new records, geographical distribution, Iran 3978
- Cyphos simplex**,
new species, taxonomy, morphology, Iran 3978
- Cyprinidae**,
food preferences, seasonal variations, *Insecta* 620
- Cyprinus carpio**,
food preferences, food organisms, *Insecta* 620
- Cypripus**,
surveys, parasitoids, pest control, *Spodoptera litoralis* 2810
taxonomy, morphology, *Nepticulidae* 4892
- Cyrtocirus**,
nest building, egg laying 1185
- Cyrtolestes**,
taxonomy, morphology 1666
- Cyrtobagha lividipennis**,
predators, insecticides effects on, pest control, *Nilaparvata lugens* 6162
- Cyrtobagha singularis**,
biological control, weed control, aquatic plants, *Salvinia molesta* 5316
- Cyrtomyia**,
new genera, Mascarenes 4864
- Cyrtomyia perisema**,
new species, Mascarenes 4864
- Cyrtopogon sabroskyi**,
taxonomy, new species, morphology, genitalia, USA, Wyoming 2421
- Cyrtusa**,
new species, taxonomy, morphology, 9 species, India 4810
- Cystoma saundersi**,
sense organs, hearing, structure 139
- Cystosoma saundersi**,
acoustic communication, song, computer applications 1159
population dynamics, reproductive behavior, mate selection 2748
reproductive effort, energetics, sex differences 9063
social spacing, sound production, courtship 2283
- Cythioate**,
chemical control, parasites, *Ixodidae*, *Siphonaptera* 4518
- Cytochemistry**,
cells, hemolymph, hemopoietic system, *Drosophila melanogaster* 6517
tumor cells, hemopoietic system, hemolymph, mutants, *Drosophila melanogaster*
6516
venom glands, *Buthus famulus* 8981
- Cytochrome**,
degradation, synthesis, fat body mitochondria, diapause, *Heliothis zea* 5818
- Cytochrome c**,
biochemistry, metamorphosis, *Musca domestica* 6555
- Cytochrome P-450**,
binding, substrate specificity, microsomes, *Musca domestica* 6561
metabolites, growth regulators, fluorescence, microsomes, *Musca domestica* 5693
microsomes, ligands, binding, *Musca domestica* 6554
- Cytogenetics**,
chromosomes, *Glossina pallidipes*, *Glossina austeni* 6258
chromosomes, *Proreus* 7841
heterochromatin, banding, nucleolus organizer region localization, *Chorthippus*
juncundus 7825
larvae, *Cochliomyia hominivorax* 2309
X radiation induction chromosome aberrations, *Hylemyia antiqua* 9404
- Cytology**,
cell lines, 20-hydroxyecdysone effects on, embryogenesis, *Drosophila* 5811
cells, neurosecretion, brain, *Amsacta collaris* 249
central nervous system cells, *Periplaneta americana* 3266
chromosomes, population genetics, geographical distribution, *Simulium tuberosum*
4694
ejaculatory duct simplex, *Calpodus ethiops* 9041
embryogenesis, dorsal organ, *Collembola* 3401
epithelium, instars development, *Locusta migratoria* 3465
eye, cells, *Calliphora erythrocephala* 3288
fruits damage, pests, *Malus*, *Tetranychus mcDanieli* 5403
heterochromatin, chromosomes, *Gastromargus africanus orientalis*, India 3898
interchromatin, optic lobe, *Poekilocerus pictus*, *Periplaneta americana*, *Belostoma*
indicum, *Polistes hebraeus*, *Sandrocottus dejeani* 4180
neurosecretory cells, castes, *Postelictotermes navori* 8914
ovaries, oocytes, development, morphology, *Rhodnius prolixus* 326
phagocytosis, cytology, midgut, larvae, *Tenebrio molitor* 103
reproductive organs, chemosterilants effects on, *tepa*, *Dysdercus cingulatus* 5085
segmentation, reviews, *Insecta* 8897
taxonomy, chromosomes, *Aphidinae* 7846
testes, ovary, degeneration, *tepa*, *Dysdercus cingulatus* 2694

Cytology, (continued)

ultrastructure, accessory gland, *Dysdercus fasciatus* 3454
ultrastructure, salivary gland, secretion, host-parasite interactions, vectors,
Rhipicephalus appendiculatus, *Theileri* para 256

Cytopathology

infection, nuclear polyhedrosis virus, *Pseudaletia unipuncta* 5744

Cytoplasm

compatibility, eggs, development, strains, *Aedes polynesiensis* 1542
effects on nondysjunction, chromosomes, *Drosophila melanogaster* 4680.
flight muscle, protein biosynthesis, *Calliphoridae* 2567
incompatibility, hybrids, pathogens, *Aedes polynesiensis*, *Aedes kesseli* 5488
sterility factors, resistance, genetic control, *Drosophila melanogaster* 3121
transport, ovary, ultrastructure, *Coccinella*, *Tenebrio* 1077

Cytoplasmic inheritance

strains, eggs development, *Aedes polynesiensis* 1542

Cytoplasmic male sterility

genetic control, pest control, *Culex quinquefasciatus* 6287

Cytoplasmic polyhedrosis virus

detection methodology, enzyme-linked immunosorbent assay, pathogens, *Euxoa*
scandens 8007

infection, association, biological control, *Insecta*, larvae 8449

infection, pathogenesis, larvae, *Insecta* 7363

infection, pathology, *Earias biplagiata* 3419

morphogenesis, *Heliothis armigera* 3397

pathogens, electron microscopy (scanning), ultrastructure, *Insecta* 8143

Cytoplasmic streaming

follicles, oogenesis, *Drosophila* 7476

Cytosol

arylamidases, digestion, proteins, midgut, *Rhynchosciara americana* 6545

Czechoslovakia

abundance, habitat preferences, *Meoneura* 6872

biomass, abundance, forests, *Araneida* 613

biomonomics, abundance, annual variations, *Noctuidae* 9182

bogs, peatlands, occurrence, new records, *Neopicrodipoda* 9481

control programs, chemical control, larvae, *Calcidae* 2930.

forests, *Palomena prasina*, abundance, biomass, seasonal variations, *Palomena*

forests, species composition, population dynamics, seasonal variations.

Branchyera, *Cyclorhapha* 7101

genitalia, morphology, *Abrostola triplasia*, *Abrostola asclepiadis*, *Abrostola*

trigemina 1723.

genitalia, morphology, differentiation, *Celyphoides cespitanus*, *Celyphoides*

flavipalpus 1734

geographical distribution, life history, morphology, *Selidosema plumana*,
Selidosema brunnearia 7104.

geographical distribution, occurrence, *Diptera* 3937.

new records, geographical distribution, larvae morphology, *Ecdyonurus macani* 777.

new records, geographical distribution, *Neoprocterus flavicornis*, *Neoprocterus*

lapposicus, *Neoprocterus scutellatus* 778.

new records, geographical distribution, occurrence, community composition.

Opetidae, *Platyepidae* 2358.

new records, geographical distribution, *Rhaphomyia nitidula*, *Xylophagus*

compositus, *Dryodromia testacea* 7901.

new species, new genera, taxonomy, morphology, *Kesselimyia chandleri* 4003.

new species, taxonomy, morphology, *Ecdyonurus samalorum* 8798.

new species, taxonomy, morphology, *Pipunculoides lichtenwardi* 2418

new species, taxonomy, morphology, *Thendion antaii* 8737.

population-environment relations, forest, population density, secondary

production, *Heteroptera* 2139

rare species, species composition, *Xylophagidae*, *Empididae* 7901

roads, environmental hygiene, seasons, *Diptera* 1349

soil fauna, population dynamics, seasonal variations, *Arthropoda* 7599

species composition, abundance, habitat, *Araneida* 6223

species composition, parasites, *Chiroptera*, *Nyctenidae* 7903

stored products, occurrence, *Pyrulidae* 9294

surveys, geographical distribution, new species, *Brachyera* 2356

taxonomic revision, identification keys, synonymy, *Shariphora* 4875

taxonomy, morphology, *Homoptera* 3213

teratology, morphology anomaly, head, thorax, *Tingidae* 3256

Czechoslovakia, Brno

diets, *Eiracoccus concolor*, *Julius terrestris*, *Forficula auricularia*, *Carabidae*,
Curculionidae 5987.

Czechoslovakia, Jerake Hory Mts.

pirimipos-methyl, insecticides, effects on nontarget organisms, population

levels, *Carabidae*, *Staphylinidae* 7571.

Czechoslovakia, Latorica R.

ecological distribution, *Ephemeroptera* 2355.

Czechoslovakia, Moravia

water management effects on community composition, *Culicidae* 7016.

Czechoslovakia, Muran Highlands

surveys, geographical distribution, population studies, *Odonata* 2357.

Czechoslovakia, Prague

pests, buildings, *Cyrtodroliolus teutonius*, *Anobium punctatum*, *Lepisma*

seccharina, *Tyrphobius putrescentiae* 592.

Czechoslovakia, Vah R.

seasonal variations, population dynamics, distribution, new records, *Braconidae*

573.

Declines

males, chemoreception, response, attractants, *Australia* 3030.

Dactyloscirus pataliputraensis

new species, taxonomy, morphology, *India*, *Bihar* 4765.

Dactyloctenium bicolor

thermoregulation, diurnal variations, movements, host plants 4319

Dacus cucurbitae

acetylcholinesterase activity, head, thorax, abdomen 7323.

dispersal, longevity, comparative studies, mass rearing, 2768.

growth, development, diets effects on, yeasts 7447.

mass rearing, sexual reproduction, fecundity, egg production, *Japan* 1850.

mating behavior, courtship 2745.

oviposition, resource partitioning, pheromones, deterrents, intraspecific

relationships 5850

pest control, chemical control, crop fields, *Cucurbita* 7788.

pests, eradication, sterile-release, population ecology 6087.

Dacus cucurbitae, (continued)

α radiation, effects on morphology, anatomy 5012

α radiation effects on morphology, development 2705

rearing methodology, automation, larvae 8020

rectal gland, secretions, chemical composition 8114

sterilization, α radiation, effects on mating behavior, fertility, females

7457.

Dacus dorsalis

hemolymph proteins, γ radiation effects on 7358.

indole-3-acetic acid, effects on gonads, histology, development 8227.

infestation, fruit trees, *Carica papaya*, USA, Hawaii 4616.

mating behavior, development, sexual isolation 8261.

mating behavior, male selection 2738.

peroxidase activity, γ radiation effects on 7356.

pests, infestation, factors affecting population density, *Carica papaya* 8538.

γ radiation, effects on development, larvae, pupae 7448.

α radiation, effects on structure, histology, midgut 7359.

rearing methodology, automation, larvae 8020

triacylglycerol lipase activity, γ radiation effects on 7355.

Dacus oleae

carbon, nitrogen, effects of diets, survival, longevity, reproduction 1109.

factors affecting development mortality, host plants 7607.

infestation, pests, *Nerium oleander*, Crete 9310.

males, pheromone traps, attractancy 3006.

mating behavior, sexual behavior 5844

mortality, larvae, pests, orchards, *Olea europaea*, Crete 7798.

pest control, pheromones 3710.

population density estimation, Lincoln Index, sampling methods, capture-recapture

studies 5621.

population density, traps, Libya 6956.

sex, pheromone, bioassays, chemical composition 5005.

sex pheromone volatiles, chemical composition 8096.

storage proteins, characterization, immunological aspects 2579.

temperature effects, larvae, pupae, development, diets 372.

Dacus opillae

abundance, seasonal variations, *Australia* 3636.

morphology, ecology, host plants phenology, *Opilia amentacea*, *Australia* 3626.

new species, morphology, geographical distribution, ecological distribution,

Australia 821.

pupae, survival, soil properties effects on 1305.

abundance, seasonal variations, *Australia* 3636

pupae, survival, soil properties effects on 1305.

Dacus tryoni

attractants, chemical analysis, proteins 3757.

flight activity, locomotion, dispersal 5977.

Dacus zonatus

fruit trees infestation, damage, *India* 5332.

Daktulosphaira vitifoliae

pest resistance, host plants, *Vitis* 9289.

Dalbergia sissoo

essential oils, response, *Coptotermes heimi* 2850.

parasite resistance, effects on parasites feeding behavior, *Bifiditermes beesonii*

481.

Dalbuis maulds

salivary gland infection, *Rayado fino virus* 5037.

Damage

Alternaria tenuissima infection, *Ceratomya trifurcata*, *Glycine max* 9277.

Busseola fusca, infestation, effects on, *Zea mays* 687.

chromosomes, procabazine, *Drosophila melanogaster* 2324.

colonies, *Apis mellifera*, pests, *Apis mellifera*, *Viola edimandsae* 1419.

colonies, parasites, *Vatsoa jacobsoni*, *Apis cerana* 4380.

coars, seeds, *Abies alba*, *Zaromyia inapissile*, *Earmomyia grusia*, *Romania* 6920.

contamination, sauerkraut, *Thrips tabaci* 8508.

control programs, tropical environment, *Isopora* 2967.

crop fields, agricultural practices, *Zea mays*, *Busseola fusca*, *Sesamia calamistis*

3748

crop fields, *Helianthus annuus*, *Atractomorpha crenulata* 5328.

crop fields, irrigation, fertilizer applications effects on, *Microtermes obesi*,

Triticum 5377.

crop fields, larvae effects on, *Diabrotica longicornis*, *Diabrotica virgifera*

3740

crop fields, pest control, *Aphis fabae*, British Isles 3800.

crop fields, pest control, crop rotation, *Microtermes obesi* 5373.

crop fields, pest control, *Epilachna varivestis*, *Glycine max*, USA, Maryland 3795.

crop fields, pest control, nuclear polyhedrosis virus, insecticides, *Spodoptera*

litura, *Brassica oleracea capitata* 8439.

crop fields, pest outbreaks, *Mythimna separata*, *Secale cereale*, *India* 6925.

crop fields, pests infestation effects on, *Diatraea grandiosella* 3822.

crop fields, pests infestation, *Tetranychus urticae*, *Arachis hypogaea* 3794.

crop fields, pests, life cycle, *Diabrotica* 7715.

crop fields, pests, *Pistacia vera*, *Telphusa pistaciace*, Iran 5296.

crop fields, *Poecilimon bosporicus*, Turkey 4537.

crop fields, yield, *Philaenus spumarius*, *Medicago sativa* 8561.

crops, economics, pests, infestation, *Gossypium*, *Heliothis* 4612.

crops, evaluation, feeding, *Phaseolus vulgaris*, *Diabrotica balteata*, *Ceratomya*

facialis 4609

crops, pest outbreaks, *Oryza sativa*, *Dicladipora amigera*, *India*, Tripura 7796

crops, pests, evaluation, *Lens culinaris*, *Spodoptera praefica* 8483.

crops, pests feeding, *Brassica oleracea*, *Trichoplusia ni*, *Pieris rapae*, *Plutella*

xylostella 8502

crops, pests, *Graptognathus leucoloma*, *Leguminosae*, New Zealand, North I. 5415.

crops, population density, developmental stages, *Telegryllus commodus* 3827.

defoliation, *Galeruca rufa* effects on, weed control, *Convolvulus arvensis* 2944.

economic analysis, crop production, *Curculio caryae*, *Carica pican* 2265.

effects on crop yield, *Nezara viridula*, *Phaseolus lunatus* 1456.

effects on water loss, leaves, *Glycine max*, *Insecta* 6939.

estimation, forests, parasites, *Dendroctonus frontalis* 683.

feeding, effects on growth, *Carica illoensis*, *Monelliopsis nigropunctata*.

Monella caryella, *Mellanocallis caryae-foliae* 4587.

feeding effects on, *Lonicera*, *Hyadaphis tatarica*, Canada, Quebec 2043.

feeding, host plants, regeneration, *Insecta*, *Nymphoides cristatum* 6801.

feeding, pests, *Myzus persicae*, *Solanum tuberosum* 8543.

feeding, pests, *Oenoblia pugnax*, *Sorghum* 8506.

feeding, pests, *Ostrinia nubilalis*, *Phaseolus vulgaris* 8571.

feeding, pests, *Ostrinia nubilalis*, *Phaseolus vulgaris* 8571.

feeding, pests, *Ostrinia nubilalis*, *Phaseolus vulgaris* 8571.

feeding, pests, *Ostrinia nubilalis*, *Phaseolus vulgaris* 8571.

feeding, pests, *Ostrinia nubilalis*, *Phaseolus vulgaris* 8571.

feeding, pests, *Ostrinia nubilalis*, *Phaseolus vulgaris* 8571.

feeding, pests, *Ostrinia nubilalis*, *Phaseolus vulgaris* 8571.

feeding, pests, *Ostrinia nubilalis*, *Phaseolus vulgaris* 8571.

feeding, pests, *Ostrinia nubilalis*, *Phaseolus vulgaris* 8571.

feeding, pests, *Ostrinia nubilalis*, *Phaseolus vulgaris* 8571.

feeding, pests, *Ostrinia nubilalis*, *Phaseolus vulgaris* 8571.

feeding, pests, *Ostrinia nubilalis*, *Phaseolus vulgaris* 8571.

feeding, pests, *Ostrinia nubilalis*, *Phaseolus vulgaris* 8571.

Damage, (continued)

- foliage, herbivory, *Eucalyptus* blakelyi, Insecta, Australia 2045.
forests, defoliation, *Orygia pseudotsugata* 1249
forests, pests effects on, *Choristoneura fumiferana*, Canada 3779.
fruit trees, infestation, *Carponya vesuviana*, *Dacus zonatus*, India 5332.
grasslands, larvae feeding behavior effects on, *Hyles lineata* 543.
herbivory, reproduction adaptations, *Lepidoptera* larvae, *Jurinea mollis* 9164.
hives, apiculture, predation, *Ursus americanus*, *Apis mellifera* 3040.
host plants, infestation susceptibility, *Ameloylo transiella*, *Prunus amygdalis* 2240.
host plants, larvae feeding behavior effects on, *Heliothis virescens*, *Gossypium* *hirsutum* 721
host plants, life history, *Eura americana* 9088.
host plants, *Margarodesia desmieri*, Ivory Coast 1791.
host plants, *Metrosideros collina polymorpha*, Insecta, USA, Hawaii 5202.
host plants, occurrence, new records, *Oreolia*, *Panicum miliare* 1242.
host plants, pest control, *Phygadeuon plumigaria*, *Purshia tridentata*, USA, Utah 3025
host plants pest resistance, *Acyrtosiphon*, *Medicago sativa* 2256.
host plants, pest resistance, diets, genetic factors, *Ostrinia nubilalis*, *Zea mays* 3780.
host plants, pest resistance, *Empoasca kraemeri*, *Phaseolus lunatus* 8459
host plants, pest resistance, *Nilaparvata lugens*, *Oryza sativa* 6197
host plants, pests effects on, *Acyrtosiphon*, *Medicago sativa* 540.
host plants, pests, susceptibility, *Panicum millicium*, *Anthergona varia soccata* 7704.
host plants, *Pinus resinosa*, *Pinus boemeri*, *Pinus coloradensis*, USA, New England 8697.
host plants, population level estimation, *Heliothis virescens*, *Heliothis zea*, *Nicotiana tabacum* 8336.
host plants, weed control, *Longitarsus albae*, *Heliotropium europaeum*, Australia 2950.
hosts, parasites, *Brachynotocoris puncticornis*, *Fraxinus excelsior* 32.
indicators, age, trapping, *Ostrinia nubilalis*, *Capsicum annuum* 8514.
invasion, host plants, *Ostrinia nubilalis*, *Lycopersicon esculentum* 6193.
infestation, host plants, *Cirsium canescens*, *Corythucha distincta*, USA, Nebraska 5198.
infestation, pest resistance, *Zea mays*, *Diabrotica virgifera virgifera* 6117.
infestation, *Pinus clausa*, *Systema marginalis*, USA, Florida 5168.
leaves, feeding, *Oligonychus punicea*, *Persea americana* 6165
leaves, host plants, feeding, *Tetranychus urticae* 7764.
leaves, orchards, pest outbreaks, *Phylloxera crataegella*, USA, Connecticut 3024
Mythimna separata effects on, *Zea mays* 2255.
orchards, pests effects on, *Carya ilicifolia*, *Cucurbita carnea* 2221.
paddy fields, infestation prediction, *Typhlocyba incertus* 3001
pasture, seed loss, feeding, *Telegryllus commodus* 9303
pasture, *Telegryllus commodus*, *Trifolium repens*, *Lolium perenne* 2254.
pest attack, *Sorghum*, *Diabrotica saccharalis* 6080
pest control, *Heliothis*, *Gossypium*, Australia, New South Wales 2988
pest control, *Isopora*, India 5369.
pest outbreaks, crop fields, *Odonotermes*, India, Punjab 5370
pest outbreaks, fruit trees, *Citrus*, *Araucaria fasciculata*, USA, Florida 4613.
pest outbreaks, *Gossypium*, *Macdonellia*, India 7733
pest outbreaks, host plants, *Atriplex canescens*, *Tridax nova*, USA, Arizona 6795
pest outbreaks, orchards, *Ameloylo transiella*, *Pistacia vera* 6105
pests, assessment methodology, trees, *Choristoneura fumiferana* 8866
pests, citrus groves, *Araucaria fasciculata*, USA, Florida 8565
pests, crop fields, *Araucaria hypogaea*, *Isopora* 5360
pests effects on, crop yield, *Medicago sativa*, *Acyrtosiphon kondoi* 3774
pests, effects on crop yield, *Vigna unguiculata*, *Nezara viridula*, *Leptoglossus* *phyllopus* 3769.
pests, fruit, *Orygia*, *Mus*, *Tetranychus mcDanieli* 5403
pests, herbivores, *Nicotiana tabacum*, *Heliothis virescens*, *Heliothis zea*, USA, Maryland 4611
pests, historical account, infestation, *Pectinophora gossypiella*, USA, California, Imperial Valley 858
pests, host plants, *Abies fraseri*, *Mindarus abietinus*, USA, North Carolina 4336
pests, pest infestation effects on, *Heliothis*, yield, *Gossypium* 8582
pests, infestation, geographical variations, *Pinus ponderosa*, *Rhyacionia* *bushnelli*, USA, Nebraska 4405
pests, infestation, *Trifolium alexandrinum*, *Bruchus affinis* 6964
pests infestation, yield, *Heliothis zea*, *Gossypium* 8526
pests, *Sorghum*, *Atherigona*, Sudan 4562
pests, *Sorghum bicolor*, *Nezara viridula*, *Chlorochroa ligata*, *Leptoglossus* *phyllopus* 8581
plantations, arid zones, *Isopora*, India 6210
plantations, pests, *Odonotermes gurdaspurensis*, *Odonotermes obesus*, India 7700
roots, pest resistance measuring techniques, *Zea mays*, *Diabrotica virgifera* 6915
seeds, effects on yield, germination, *Isopora*, *Triticum* 5331.
silviculture, defoliation, pests, *Populus*, *Hydrocotyle* 5349
susceptibility, indane effects on, *Pinus sylvestris*, *Hydrocotyle* 9315
Syzgium jambolana, host-parasite interactions, *Antipsila anna* 3593
trees, infestation, *Camponotus pennsylvanicus*, USA, New Jersey 8480
Triticum crop fields, biotypes, *Schizaphis graminum*, USA, Texas 3761
wood, urban environment, feeding behavior, *Coptoermes kishon*, India 1405
yield, larvae feeding, *Nezara viridula*, *Vigna unguiculata* 2235
yield, *Zea mays*, *Diabrotica saccharalis*, *Sitotapha frugiperda* 3751
yield, *Zea mays*, *Sitophilus zeamais* 2039
- Damania**,
parasites, detection methodology 2483
Damania ovis,
parasites, livestock, pest control, Australia 3746
Damascaria,
new genera, morphology, Madagascar 3209
Damascaria carayoni,
new species, morphology, taxonomy, Madagascar 3209
Damascaria flavocuticularis,
new species, morphology, taxonomy, Madagascar 3209
Damascaria kerschneri,
new species, morphology, taxonomy, Madagascar 3209
Damascaria pauliani,
new species, morphology, taxonomy, Madagascar 3209
- Damascaria villiersi**,
new species, morphology, taxonomy, Madagascar 3209.
Daminioide,
host plants, pest control, population density, *Psylla pyrcocla* 688.
Damiania ovis,
infestation, sheep, effects on wool production 6889.
Dams,
effects on species composition, abundance, *Placoptera*, Canada, Alberta, Bow R. 8608.
Dansinae,
food preferences, alkaloids sequestering, Solomon Is. 8304.
Danaua chrysippus,
mortality, life history, population dynamics 7610
Danaua plexippus,
abundance, geographical distribution, USA, Wisconsin 7566
gamma butyric acid effects on neurophysiology, hemolymph 4152.
cardenolide, effects on oviposition larvae survival, *Asclepias humistrata*, USA, Florida 9154
diapause, adults, sex differences, seasonal variations 350
energetics, metabolism, overwintering aggregation, USA, California 6844.
hemolymph, lipid composition, migration 2566
juvenile hormones effects on reproductive organs 5094
juvenile hormones effects on reproductive organs development 2713
juvenile hormones effects on reproductive organs growth 4275
mortality, larvae, population dynamics 7610
occurrence, migrations, British Isles 9449
ovary, dormancy, overwintering 3610
oviposition, survival, larvae, host plants, *Asclepias humistrata* 5958
parasitism, food plants, *Sturmia convergens*, seasonal variations, size 2068
physical properties, magnetization 7280
thermoregulatory behavior, migrations, population dynamics 6846.
Daphnia minnehaha,
predators effects on polymorphism, *Chaoborus americanus* 572.
Daphnia pulex,
ecological distribution, predation effects on, *Chaoborus americanus*, USA, Michigan 583
population regulation, predators, ponds, *Chaoborus* 8616
predators effects on polymorphism, *Chaoborus americanus* 572
vertical distribution, abundance, predation effects on, *Aclis semisulcatus* 5438
Daphnia pulex,
zooplankton, predation, feeding behavior, *Chaoborus trivittatus*, larvae 2001.
Dark,
culture, effects on eye ultrastructure, *Drosophila melanogaster* 131.
tolerance, fecundity, *Drosophila simulans*, *Drosophila melanogaster* 8235
Dasieneura brassicae,
pests, infestation, cultivars susceptibility, *Brassica napus* 9308
Dasieneura larkus,
development, mortality, forests pests, USSR, Siberia 6940
Dasytheres,
taxonomy, morphology 8742.
Dasythira argentea,
pest outbreaks, population dynamics, Japan 3723.
Dasythira podibunda,
pathology, characterization, *Nudaurelia* β virus 1827.
Dasythira forsteri,
new species, taxonomy, morphology, Solomon Is 7176.
Dasythira oppressa,
new records, geographical distribution, Canada, British Columbia 5526.
interspecific relationships, *Dysmalus* 6040
Dasythira thompsoni,
tropical environment, habitat duration, pools, distribution, time 6832.
Dasyntilla,
activity patterns, sand flats, diurnal variations, seasonal variations, USA, Michigan 7518
Dasyneura lili,
chemical control, pest control, insecticides 8451
Dasyproctus,
ethology, South Africa 471
Dasyproctus bipunctatus,
feeding behavior, South Africa 471
Dasyproctus dubiosus,
feeding behavior, South Africa 471
Dasyproctus immitis,
feeding behavior, South Africa 471
Dasyproctus ruficaudis,
feeding behavior, South Africa 471
Dasyproctus westermanni,
reproductive behavior, feeding behavior, life history, South Africa 471.
Data,
analysis, graphic representation, biometrics, population studies, *Apis mellifera* 7924
Data acquisition,
activity patterns, measuring techniques, computer applications, microcomputers 4914
Data banks,
bibliographies, *Lepidoptera* 4756
endangered species, rare species, wildlife conservation, Invertebrata 2147
information systems, systematics, computers, Arthropoda 4759.
Data processing,
activity patterns, measuring techniques, computer applications, microcomputers 4914
Datana integerrima,
pests, remote sensing methodology, defoliation, abundance, geographical distribution 8855
Datana integerrima,
pests, host plants, defoliation, *Juglans nigra*, USA, Illinois 7725.
Daucus carota,
host plants, infestation, *Phymata wolfii*, Canada, Ontario 6796.
Daucus carota,
host plants, odors, olfaction, orientation, *Pala rosae* 8264
roots, absorption, insecticides, parathion 7747.
DDT,
chemical control, malaria transmission vectors, *Anopheles darlingi*, French Guyana 636
chemical control, nuts pests, *Helopeltis antonii*, Sri Lanka 677

DDT, (continued)

- chemical control, vectors, disease control, filariasis, *Anopheles farauti*, Guadalcanal 1357
- insecticides, dusts, efficacy, *Amarasea biguttula biguttula* 749
- insecticides, effects on body size, fecundity, survival, *Culex quinquefasciatus* 570
- insecticides, irradiation, toxicity *Tribolium castaneum* 7418
- insecticides, selection, males release, *Anopheles gambiae* 6135
- insecticides, storage, efficacy, *Callosobruchus maculatus*, *Callosobruchus chinensis* 7686
- insecticides, cross-resistance, permethrin, *Blattella germanica* 5049
- pest control, crop fields, *Spodoptera litura*, *Brassica oleracea capitata* 8439
- pest control, pesticide residues, *Toxotes persulcatus*, USSR 9253
- pesticide resistance, *Anopheles*, USSR 9436
- pesticide resistance, *Anopheles*, USSR 9439
- pesticide resistance, *Cimex lectularius* 9434
- pesticide resistance, herbability, *Plodia interpunctella* 1560
- pesticide resistance, population genetics, bioaccumulation 1015
- pesticides organochlorine, toxicity, *Musca domestica* 7414
- pollution effects uptake, *Culex pipiens* 4219
- powders, toxicity, *Spodoptera litura* 7421
- toxicity, stored products pests, *Insecta* 7409

Dead Sea,

- occurrence, water salinity, *Stratiomys longicornis* 9375

Deamethrin,

- insecticides, pest control, traps, *Glossina tachinoides*, *Glossina palpalis gambiensis*, Ivory Coast, Leraba R 4550

Decamethrin,

- chemical control, efficacy, *Psorophora columbiae* 744
- control programs, African trypanosomiasis, *Glossina*, Upper Volta 1345
- effects on, pest outbreaks, *Nilaparvata lugens* 307
- effects on population growth, crop fields, *Nilaparvata lugens* 6111
- insecticides, chemical control, *Aedes fluviatilis*, *Culex pipiens fatigans* 5150
- insecticides, chemical control, pests, *Stirpophilus zeamais*, *Sitotroga cerealella* 6192
- insecticides, effects on, *Nilaparvata lugens* 306
- insecticides, toxicity, larvae, *Simulium ornatum*, *Simulium gnomum* 5053
- insecticides, traps, pest control, *Glossina fuscipes quanzensis*, *Glossina palpalis palpalis*, Congo, People's Rep 4574

Decay fungi,

- softwoods, effects on food preferences, *Coptoderus acinaciformis* 1196

Z-5-Decenyl acetate,

- sex pheromone, pest control, efficacy, *Euxoa ochrogaster* 742

Decomposition,

- leaf litter, deserts, Tyndidae, Nematoda bacteria fungi 2132
- leaf litter, effects on soil properties, *Juncus sp.*, *Spodiopogon* 5248
- leaf litter, nutrient cycles, soil fauna, munda, Arthropoda, USA, Alaska 5989
- leaf litter, savannahs role, *Isopoda*, South Africa 4199
- leaf litter, tree holes, food sources, *Aedes triseriatus*, USA, Indiana 9377
- nutrients, forest floor litter, Arthropoda 2114

Decticus albifrons,

- karyotypes, evolution, phylogeny 1467
- zoogeography, morphology, variations, intraspecific relationships, *Decticus verrucivorus* 4701

Decticus verrucivorus,

- neurophysiology, mechanoreceptors, auditory perception 7293
- vibratory stimuli, mechanoreceptors, neurophysiology 3298
- zoogeography, morphology, variations, intraspecific relationships, *Decticus albifrons* 4701

Defective mutant,

- cells survival, ionizing radiation, ultraviolet radiation, *Drosophila melanogaster* 3902
- development, histology, ultrastructure, *Drosophila melanogaster* 765
- embryogenesis, *Drosophila melanogaster* 1812
- gene mapping, longevity, *Drosophila melanogaster* 5450
- morphogenesis, survival, melanoma, *Drosophila melanogaster* 1527
- neuroanatomy, morphology, leg, *Drosophila* 896
- protein biosynthesis, wing discs, *Drosophila melanogaster* 3908
- stings, *Apis mellifera* 768

Defense secretions,

- abdomen, exocrine glands, *Rhyacophila fuscata* 3388
- antifeedants, *Chauliognathus*, *Phidippus* 2512
- biochemical analysis, *Acorbionotermes subfusciceps* 3380
- biochemical analysis, *Amarygmus tristis* 3382
- biochemical analysis, *Nasutitermes* 3379
- chemical composition, larvae, *Papilio* 2611
- chemical composition, taxonomy, *Bulbitermes singaporensis* 2609
- mechanical properties, morphology, *Gonotopis* 3381
- toxins, *Prothionotermes simplex*, *Schedorhinotermes lamanianus*, biochemical analysis 3383

Defense mechanisms,

- agonistic behavior, social behavior, *Apicitermes* 6219
- association, diets, *Lycæna*, *Formicidae* 1180
- biochemical characteristics, anthraquinones, anthrones, *Pyrrhalla luteola* 6734
- burrowing behavior, *Cicindela willisoti*, USA, Arizona, Sulphur Springs Valley 3388
- colonial characteristics, *Formicidae* repellents, *Polistes fuscatus* 6984
- defense secretions, blood, *Gallerucida nigromaculata* 7528
- foaming, *Pachycondyla* 476
- food organisms, predation effects on, *Acari*, *Pisces* 6228
- host plants, cross-resistance, pesticides, *Tetranychus urticae* 6284
- host plants, *L-canavanine*, effects on midgut epithelium, *Manduca sexta* 4391
- hosts, parasitoids host searching behavior, *Apanteles euphydryidis*, *Euphydryas phaeton* 5932
- interspecific relationships, *Reticulitermes flavipes*, *Reticulitermes virginicus*, *Solenopsis geminata* 1795
- nest building, colonial characteristics, *Synecia surinama* 4643
- parasites, *Arrenurus*, *Zygoptera* 6762
- seed production (biological), nests, *Synecia virginea* 3847
- stabilimenta, webs structure, *Argiope aurantia*, *Argiope trifasciata* 1990
- stridulation, disturbance effects on, *Megaloblatta blaberoides* 4341
- taste aversion, *Phasianus colchicus*, *Coccyllidae* 9120
- Defense secretions,**
- biochemical analysis, chemical composition, *Carlisis wahlbergi* 5018
- biosynthesis, *Nasutitermes octopilis* 253
- chemical composition, *Arctostema*, New Zealand 1802

Defense secretions, (continued)

- chemical composition, comparative studies, phylogeny, *Nasutitermes* 1566
- chemical composition, *Curvitermes stricklandi* 1797
- chemical composition, *Nasutitermes*, Papua New Guinea 255
- chemical composition, *Reticulitermes flavipes*, *Reticulitermes virginicus* 1795
- chemical composition, *Stygomyia spinifera* 986
- chemical composition, *Synecia* 1799
- chemical composition, taxonomy, *Staphylinidae*, New Zealand 247
- chemical content, *Dufour's Gland*, *Camponotus*, *Atta sexdens* 254
- chemical content, *Megacephala virginea* 259
- composition, sex pheromone, mating behavior, *Taenopoda eques* 5010
- defense mechanisms, blood, *Gallerucida nigromaculata* 7528
- Dufour's Gland*, chemical composition, volatiles, phylogeny, *Andrenidae*, North America 245
- Dufour's gland*, chemical composition, volatiles, *Rhytidoponera metallica*, Australia 246
- exocrine glands, physiology, *Parastopozus armaticeps* 1796
- Defensive behavior,**
- activity patterns, coloration, sound production, *Sipyloloides sipylus* 6733
- alarm behavior, alarm pheromone, attack, *Polybia occidentalis* 2795
- anti-predator behavior, *Mymecoloma*, *Formicidae* 6836
- competition, *Apoccephalus* parasites effects on, *Pheidiote dentata*, *Solenopsis texana* 3576
- maternal behavior, predators, *Gargaphia solani* 3563
- nest building, nest provisioning, *Stictia maculata* 6666
- nests, *Catantopus guineensis*, Ghana 578
- pheromones, polydetic behavior, *Nasutitermes* 6685
- predators, *Araneidae*, *Uloboridae* 9117
- predators, vocalization, *Cynia tenera*, *Chiroptera* 5914
- social behavior, communication, nests, *Synecia surinama* 4305
- Deficiency,**
- retinol, effects on phototaxis, photosensitivity, *Bombix mori* 2767
- Deficient mutant,**
- DNA repair, procabazine induction, *Drosophila melanogaster* 2324
- gene expression, resistance, pathogens, *Drosophila melanogaster* 3879
- maternal effects, embryogenesis, *Drosophila* 764
- sex chromosomes lesions, DNA repair, *Drosophila* 5474
- spermatogenesis, *Drosophila melanogaster* 3903
- visual discrimination learning, memory, *Drosophila melanogaster* 5122
- Deficient mutants,**
- chromosomes, *Stauroderus scalaris*, Spain 7034
- Defoliation,**
- biological control, infection, *Bacillus thuringiensis*, *Choristoneura fumiferana* 3041
- crop fields, pest control, *Insecta*, *Solanum tuberosum* 3814
- fungi, forest, factors affecting, *Orygia pseudosugata* 1249
- effects on community structure, *Orygia pseudosugata*, *Coniferales*, USA, Idaho 3601
- effects on survival, *Insecta*, *Pinus kesiya*, *Pinus oocarpa* 3596
- food selection, *Vernonia patens*, *Pericopsis leucophaea*, Costa Rica 5164
- grazing, agricultural practices, biological control, *Inopos rubricipes*, Australia 729
- host plants, interspecific relationships, *Canna edulis*, *Calpodes ethius*, Mexico, Sinaloa, Mazatlan 5967
- host plants, pests, *Datana integerrima*, *Juglans nigra*, USA, Illinois 7725
- host plants, *Publilia concava* effects on, *Solidago altissima* 2073
- infestation, *Cleora injectaria*, *Avicennia alba*, Thailand 2853
- infestation, *Hypera postica*, *Medicago sativa* 6962
- pasture, effects on population levels, *Costelytra zelandica* 545
- pest control, predators, crop fields, *Anticarsia gemmatilis*, *Glycine* max 6148
- pest outbreaks, host plants, *Atriplex canescens*, *Tridax nova*, USA, Arizona 6795
- pest outbreaks, *Lymantria dispar*, USA, New Jersey 4542
- pest, crop yield, *Glycine* max, *Cynithia cardui*, *Platyphena scabra* 3781
- pests, effects on yield, crops, *Zea mays*, *Mythimna separata* 6941
- pests, effects on yield, *Oryza sativa*, *Pseudaletia unipuncta* 8489
- remote sensing methodology, pests, *Datana integerrima* 8855
- silviculture, damage, pests, *Populus*, *Insecta* 5349
- weed control, biological control, *Galeruca rufa*, *Convolvulus arvensis* 2944

Deficient mutant,

- Degeneration,**
- flight muscle, seasonal variations, life history, *Lisrochropterus oryophilus* 1732
- oocytes, aging, fecundity, *Plodia interpunctella*, *Ephestia cautella* 9062
- ovary, testes, teps, *Dysdercus cingulatus* 2694
- Degradation,**
- cytochrome, mitochondria, fat body, diapause, *Heliothis zea* 5818
- insecticides, chemical control, ashes effects on, *Laspeyresia pomonella*, USA, Washington 3785
- insecticides, tralomethrin, tralocrydlin, *Trichoplusia ni*, *Musca domestica*, *Periplaneta americana* 316
- manure, adults body size effects on, *Onthophagus gazella* 2897
- pheromones, enzymatic activity, cuticle, *Trichoplusia ni* 4169
- phorate, soil, temperature, bioassays, *Drosophila melanogaster* 7402
- Dehydration,**
- survival, water balance, *Tenebrio* 236
- Dehydroabietic acid,**
- feeding behavior deterrents, host plants, *Pristiphora erichsonii* 623
- Deilephila elpenor,**
- anemotaxis, chemical stimuli, flowers 5866
- Deilephila nerii,**
- hemolymph 20-hydroxyecdysone, effects on melanization, pupation 8094
- hemolymph 20-hydroxyecdysone, effects on melanization, pupation 8096
- Deinacidia,**
- stridulatory apparatus, morphology, bioacoustics, sound frequency 5020
- Deinocerites cancer,**
- sensilla, anatomy, morphology, reviews 8921
- Deinophloeus,**
- taxonomic revision, morphology, keys 4800
- Deinophloeus hirsutus,**
- new species, taxonomy, morphology 4800
- Deinophloeus shellei,**
- new species, taxonomy, morphology 4800
- Deinopsis apicicornis,**
- new species, morphology, taxonomy 3181
- Deleatidium,**
- life history, New Zealand, *Waitakere R.* 451

- Della**,
new species, taxonomy, morphology, China, People's Rep. 820.
pests, infestation, *Brassica campestris*, Canada, Alberta 8479.
- Della antiqua**,
chemical control, insecticides, efficacy 3733.
- Della brassicae**,
chemical control, biological control, predators, insecticides 2210.
pest control, effects on crop yield, *Brassica napus* 3039
pest control, insecticides, chitinase 2622.
traps, efficacy, attractants 6188.
- Della coratida**,
diapause termination, eggs, soil temperature effects on 3473.
larvae, chemical control, seed treatments, insecticides, permethrin 6133.
new records, geographical distribution, introduced species, life history, North America 3158.
predictions, population levels, eggs, trapping, females 1290.
- Della cyclocera**,
new species, taxonomy, morphology, China, People's Rep. 820.
- Della hyacinthosternita**,
new species, taxonomy, morphology, China, People's Rep. 820.
- Della lamellistictodes**,
new species, taxonomy, morphology, China, People's Rep. 820.
- Itria pinilobe**,
new species, taxonomy, morphology, China, People's Rep. 820.
- Della radicum**,
trapping, attractants, crop fields 3752.
- Delichon urbica urbica**,
nests, population density variation, *Ceratophyllus hirundinis*, *Ceratophyllus farreri*, *Ceratophyllus rufescens* 6030.
- Delphacidae**,
abundance, ecological distribution, polymorphism, salt marshes, USA, Florida 6833.
flight activity periodicity, diurnal variations 6711.
- Delphacodes campestris**,
host preferences, population density, grasses 710.
- Delphinium aeloni**,
nectar, standing crop, effects on feeding behavior, *Bombus appositus* 495.
- Delphinium nissouli**,
flowers, color, pollinators feeding behavior effects on 1291.
- Deltamethrin**,
effects on viruses disease transmission, host plants, *Myzus persicae* 6954.
pest resistance, enzyme activity, *Myzus persicae*, *Phorodon humuli* 2657.
temperature effects on toxicity, *Triphosia ni*, *Spodoptera frugiperda*, *Heliothis virescens* 8206.
toxicity, effects on flight activity, *Glossina morsitans* 314.
- Deltocephalinae**,
chromosomes, oögonia, spermatogonia 3087.
- Deltocephalus**,
chromosome number, chromosomes morphology 2325.
- Deltocephalus chibola**,
chromosome number, chromosomes morphology 2325.
- Deltocephalus coronifer**,
feeding, food utilization, nitrogen 6747.
- Deltocephalus notatus**,
chromosome number, chromosomes morphology 2325.
- Deltocephalus rufolineatus**,
chromosome number, chromosomes morphology 2325.
- Deltocephalus veinatus**,
chromosome number, chromosomes morphology 2325.
- Deltoesthus scitulus**,
new species, taxonomy, morphology, Mexico 3980.
- Demark**,
surveys, geographical distribution, environmental factors, Halipidae 5516.
- Demeton**,
insecticides, toxicity, *Phyllonorycter blancardella*, *Apanteles ornigis* 8200.
- Demeton-S-methyl**,
insecticides, field trials, chemical control, *Calocoris norvegicus*, *Sidna kinbergi* 8476.
- Demodex**,
medical importance, skin diseases, domestic animals 2932.
new species, taxonomy, morphology, parasites, *Felis domesticus* 7140.
parasites, detection methodology 2483.
- Demodex bovis**,
case reports, bovine demodicidosis, Nigeria 6075.
- Demodex brevis**,
infestation, man, case reports, sebaceous gland 3663.
- Demodex folliculorum**,
skin diseases, domestic animals, incidence, treatment, Sudan 2923.
- Demography**,
population dynamics, diets, *Achipteria holomonensis* 6002.
population dynamics, life history, *Drosophila melanogaster* 7065.
reproductive strategy, habitat adaptations, littoral zone, freshwater environments, *Scatella picea* 6861.
sampling, carrion traps, *Arthropoda* 1694.
- Demoulinellus**,
new genera, taxonomy, morphology, South America 7976.
new genera, taxonomy, South America 5575.
- Demoulinellus coloratus**,
new species, taxonomy, South America 5575.
- Dendrocerus**,
parasites, life history, hyperparasitism, *Aphidius*, *Acyrtosiphon* 4382.
- Dendrocerus aphidum**,
synonymy, breeding, *Dendrocerus breadalbensis* 4019.
- Dendrocerus breadalbensis**,
synonymy, breeding, *Dendrocerus aphidum* 4019.
- Dendrocerus carpenteri**,
abundance, host-parasite interactions, *Metopolophium dirhodum*, *Stibion avenae* 1228.
hyperparasitism, venom, effects on, larvae, *Aphidius smithi* 2820.
- Dendrocerus solarii**,
taxonomy, morphology, status 7211.
- Dendroctonus**,
parasitism, drought effects on, Coniferales, USA, California 4394.
- Dendroctonus brevicornis**,
pest control, chemical control, *Pinus ponderosa* 8525.
pheromones, attraction, interspecific relationships, *Ips paraconfusus* 1929.
- Dendroctonus brevicornis**, (continued)
toxicity, insecticides, lindane, carbaryl, chlorpyrifos 4228.
- Dendroctonus frontalis**,
association, seasonal variations, Acari, USA, Louisiana 4430.
egg production, fertility, fecundity, reproductive behavior 1150.
environmental effects, weather, seasonal variations, flight activity 1169.
enzymes, assays, immune serum 1769.
feeding behavior, host plants extracts effects on 1941.
food organisms, food preferences, *Tanaisius dubius* 6014.
hosts, parasites olfaction, odors, Hymenoptera 4912.
methoprene effects on reproduction, chemical control 383.
mutualism, *Dendroctonus frontalis* 500.
olfaction, pheromones enantiomers, electrophysiological recording, antennal sensilla 4313.
oviposition, nest building, galleries 1891.
parasites, infestation, forests, mathematical models 683.
pest attack, gallery construction, oviposition, emergence 6680.
pest control, insecticides, *Pinus* 8484.
pest control, mapping, damage, USA, Texas 9317.
pest control, trees, pheromones inhibitors 3788.
pest outbreaks, infestation, population dynamics, mathematical models, USA 3644.
pests, integrated control, management 9329.
pheromones biosynthesis, juvenile hormones effects on 5700.
population density, host-parasite interactions, *Dendroctonus sulcatus*, *Heydenia unica*, *Rhopalosiphum*, *Roprococcus xylophagorum* 505.
population dynamics, emergence, galleries construction, infestation, mathematical models, USA 3643.
population dynamics, estimation methodology 1278.
population dynamics, infestation, effects on forests community structure 3600.
predation, *Coniteus glaber*, *Coniteus parallelus* 2797.
symbiosis, nitrogen-fixing bacteria, *Enterobacter agglomerans* 1214.
temperature effects, population density, female body size, emergence, effects on, nest building, oviposition 1879.
- Dendroctonus micans**,
metabolism, cold resistance, hibernation 6560.
- Dendroctonus ponderosa**,
population regulation, mortality, food availability, temperature effects 1299.
- Dendroctonus ponderosae**,
chemoreception, gustatory stimuli, feeding behavior, orientation, host plants, *Pinus contorta* 4303.
development, reproduction, host plants effects on, rearing, *Pinus* 5975.
pest control, ethylene dibromide, forestry 8242.
pest control, methodology, explosives, *Pinus contorta* 5303.
pest resistance, host plants, *Pinus contorta latifolia* 6186.
- Dendroctonus pseudotsugae**,
infestation, mortality, Coniferales, USA, Colorado 7551.
phototaxis, light wavelength effects on 2753.
- Dendroctonus rufipennis**,
infestation, mortality, Coniferales, USA, Colorado 7551.
pest attack, ethanol, host plants, *Picea* 7843.
pest control, environmental effects, emergence 6960.
- Dendroctonus terebrans**,
enzymes, assays, immune serum 1769.
symbiosis, nitrogen-fixing bacteria, *Enterobacter agglomerans* 1214.
- Dendroica palmarum palmarum**,
predators, biological control, crop field, *Trichophasia ni* 2222.
- Dendroica canadensis**,
functional morphology, mandibles, feeding behavior, larvae 4357.
- Dendroica neobisecta**,
mutualism, *Dendroctonus frontalis* 500.
- Dendrolimus benderi**,
new records, geographical distribution, taxonomy, morphology, females, India 4739.
- Dendrolimus**,
pest control, control programs, forests, China 2216.
- Dendrolimus hyrtica**,
chromosomes, karyotypes, India 5468.
- Dendromyrmex chartifex**,
interspecific relationships, webs, construction, *Dendromyrmex fabricei* 2272.
- Dendromyrmex fabricei**,
interspecific relationships, webs, construction, *Dendromyrmex chartifex* 2272.
- Dendrophilinae**,
keys, morphology 8753.
- Dendroptus montanus**,
new species, taxonomy, morphology, USSR, Crimea 6342.
- Dendroterus protuberans**,
parasites, new records, geographical distribution, USA, California 7121.
parasites, oviposition, *Scolytus multistriatus* 2017.
- Dendroterus sulcatus**,
host-parasite interactions, *Dendroctonus frontalis* 505.
- Dengue**,
diagnosis, dengue virus, *Aedes albopictus* cell culture, man 9224.
disease transmission, man, *Aedes albopictus*, Malaysia 4502.
vectors, *Aedes albopictus*, man 9226.
- Dengue virus**,
antigens, association *Aedes albopictus*, detection, immunoassays 8166.
bioassays, use, *Toxorhynchites splendens* 1820.
cell culture, *Aedes albopictus*, diagnosis, dengue, man 9224.
dengue, vectors, *Aedes albopictus*, man 9226.
detection, immunofluorescence, experimental infection, *Toxorhynchites splendens* 8167.
disease transmission, vectors, *Aedes albopictus*, Malaysia 4502.
isolation, cell culture, *Aedes albopictus* 9225.
virulence, cell lines, *Toxorhynchites amboinensis* 7388.
- Densimera maritima**,
new species, taxonomy, morphology, Borneo 23.
- Demark**,
new records, geographical distribution, *Stigmella svenssoni*, *Trifurcula cryptella*, *Trifurcula hannoverella*, *Aethes diducida* 5515.
new species, taxonomy, morphology, *Plutidae*, *Clambidae* 4783.
new species, taxonomy, morphology, *Siphona ingae*, *Siphona mesnili*, *Siphona varia* 7180.
pest outbreaks, climate, mathematical models, *Agrotis segetum* 5412.
pests, surveys, forestry, agriculture, horticulture, insects 5308.
surveys, habitat, geographical distribution, pollinators, *Syrphidae* 5514.

- Denmark, Gudenaa R.,**
new records, geographical distribution, Tricholeiochiton fagesii, Triacnodos simulans 6317.
- Density,**
capture efficiency, pheromone traps, Chonstoneura 1679
nests, rain forests, Ageleina consociata, Gabon 5213.
- Densomucleoid virus,**
diseases, reviews, Bombyx mori 8988
infection, susceptibility, population genetics, Bombyx mori 2351
storage, effects on infectivity, larvae, Aedes aegypti 8992
- Dentrocopos pubescens,**
predation, feeding, pupae, Hyalophora cecropia 7592.
- Deola flavopicta,**
population dynamics, pest attack, Brachyura, Brazil 6158
- 2-Deoxy-D-glucose,**
staining methodology, nerves, Insecta 8013
- 3-Deoxy-3-fluoro-D-glucose,**
metabolism, effects on glycolysis, toxicity, Locusta migratoria 6619.
- Drosophilaculeus 1,**
hypersensitivity sites, identification, association Sgs4 gene, DNA, 5-terminus, Drosophila 6250
site location, chromatin, ribosomal proteins, genes, Drosophila melanogaster 1503
- Dephosphorylation,**
ribosomal protein S6, heat shock, Drosophila melanogaster 7319.
- Deposition,**
cuticle, integument, Periplaneta americana 4953.
spermatophores, Pelokylia malabarica, food availability, females, water content, effects on 1875.
- Deposits,**
marking behavior, aggregation behavior, Ixodes matopi, Zimbabwe 12.
- Depressaria,**
taxonomy, morphology, synonymy 7225.
- Depressaria nemotela,**
new species, taxonomy, morphology, Europe 7997.
- Depth,**
ecological distribution, benthos, Chironomidae, Sweden, Latnjajaure L. 7020.
- Depuration,**
bioaccumulation, benzo(a)pyrene, Chironomus riparius 7813
elimination, feces, diflubenzuron, insecticides, bioassays, Pseudophusa includes 299
- Dermacenter,**
bites, histology, case reports, domestic animals 4488
disease transmission, epidemiology, tick-borne encephalitis virus 9229
- Dermacenter albidipictus,**
aggregation, habitat, larvae, Canada, Alberta 9181.
molting, spermatogenesis, timing 1885.
pest control, livestock, efficacy 4524.
- Dermacenter andersone,**
vectors, Colorado tick fever, USA 637.
- Dermacenter andersoni,**
amino acid biosynthesis, guanine 8954
bites, attachment sites, histamine, pest resistance, guinea-pigs 6069.
blood meals, protein composition, digestive tract, immunology 4997.
gyandromorphism, morphology, sex chromosomes 1547.
infestation, guinea-pigs, immune response (humoral) 9260
infestation, hosts pest resistance, survival, larvae, guinea-pigs 5272
labelling, infection, Anaplasma marginale 6598
spermatogenesis, serotyping, Rickettsia, USA, Montana 1006
salivary gland antigens, pest resistance, biological control 6058.
sex pheromone glands, storage, lipids 5008.
temperature effects on infectivity, Anaplasma marginale 8137.
traps, efficacy 5622
- Dermacenter marginatus,**
vectors, disease transmission, Colorado tick fever virus 3655.
- Dermacenter marginatus,**
infestation, resistance, Mammalia 2926.
nymphs, disease transmission, Babesia microti 8418.
- Dermacenter reticulatus,**
nymphs, disease transmission, Babesia microti 8418.
- Dermacenter silvarum,**
blood meals, body weight, egg production, China, People's Rep. 2704.
life history, temperature effects, humidity effects on 475.
- Dermacenter variabilis,**
activity patterns, winter temperature effects on 7587.
exocrine glands, ultrastructure 2614.
fumigation, antiallatripin precocene 2(P2), effects on embryogenesis 9344.
infestation, guinea-pigs, immune response (humoral) 9260
infestation, pest resistance, skin sensitization antibodies, Sylvilagus floridanus 5276.
pest control, livestock, efficacy 4524.
pest control, sex pheromone effects on mating behavior disruption 1907.
sex pheromone glands, storage, lipids 5008.
spermatogenesis, kinetics 2725.
Spermatogenesis, testes development, cell cycle 2719.
vectors, disease transmission, Rickettsia prowazekii, Glaucomys volans 1322.
- Dermoptera,**
taxonomy, morphology, new species 2406.
- Dermatitis,**
case reports, man, Ornithonyssus bacoti 1363.
- Dermatobia hominis,**
chemosterilization methodology, chemical control, pests, thiopeta, Stomoxys calcitrans 5353.
parasites, effects on sexual behavior, longevity, parasites, Macrocheles muscadomesticae 5086
pest control, chemosterilization, tepa, thiopeta, hempa, thiohempa 5351
- Dermatophagoides farinae,**
allergens, urticaria 3684.
- Dermatophagoides farinae,**
allergens, histamine release, man 1372.
antigens, allergens, immunochemistry, physicochemical properties 1368.
antigens analysis 2913.
antigens, hypersensitivity, atopic dermatitis, man 8405.
antigens, immunochemistry, antigenic relationship, Sarcoptes scabiei 1381.
asthma, man, immunotherapy 2174.
house dust entomofauna, distribution, altitude, Spain 578.
hypersensitivity (immediate), lymphocytes, immunoglobulin E response, man 6055.
- Dermatophagoides farinae, (continued)**
hypersensitivity, man, seasonal variations 1323.
temperature effects, water balance 2605.
- Dermatophagoides pteronyssinus,**
allergens, house dust, man 1371
allergens, urticaria 3684.
antigens analysis 2913.
antigens, purification, characterization 8410
antigens, role, mucocutaneous lymph node syndrome, man 8435.
house dust, allergic diseases, therapy, symptoms, man 7634.
house dust entomofauna, distribution, altitude, Spain 578.
life cycle, house dust pests 6056
medical importance, allergens, Switzerland 672.
oral administration, sensitization, treatment, hypersensitivity, man 8434.
- Dermatophagoides siboney,**
new species, taxonomy, morphology, house dust, Cuba 3970.
- Dermatophilus congolensis,**
pathogens, effects on oviposition, sheep, Lucilia cuprina 1333.
- Dermestes ater,**
burrowing organisms, occurrence, mummies 2894.
- Dermestes carni vorous,**
carrion, community composition, succession, Costa Rica 5166.
- Dermestes frischii,**
burrowing organisms, occurrence, mummies 2894.
- Dermestes maculatus,**
growth, development, temperature effects 1871.
pesticide resistance, lindane, strains, British Isles 3115.
proteinase, characterization, isoelectric focusing 5692.
- Dermestes vulpinus,**
pests, γ radiation, effects on physical activity, membranes 5133.
- Derodontidae,**
new records, geographical distribution, British Isles 5509.
- Derovatellus,**
genitalia, morphology 4781.
geographical distribution, Gambia 1615.
new records, Cameroon, Senegal, Uganda 4781.
- Derovatellus hancocki,**
new species, taxonomy, morphology 1615.
new species, taxonomy, morphology, Uganda 4781.
- Derovatellus moqueursii,**
phylogeny, morphology, genitalia, males, syntypes 8043.
- Derovatellus onorei,**
new species, taxonomy, morphology, Congo, People's Rep. 7163.
- Description,**
new species, Acari, Papua New Guinea 6.
- Deserts,**
ecophysiology, temperature effects on oxygen consumption, Arthropoda, Insecta 5710.
leaf litter, decomposition 2132.
mating behavior, role, visual stimuli, auditory stimuli, Drosophila 2737.
migrations, population genetics, Drosophila, USA, California, Death Valley 6814.
respiratory system anatomy, adaptations, Menacurus ovalis 8924.
- Design,**
containers, Insecta, transport, shipment, samplers 1689.
feeding apparatus, blood sucking Insecta 1700.
instruments, electrophysiological recording 1680.
pheromone traps, efficiency, males, Pectinophora gossypiella 2477.
samplers, Hyalomma anatolicum excavatum 1698.
samplers, instruments, Insecta 1697.
traps, flight, Insecta 1687.
- Desmethyldiiodimeform,**
pesticides, effects on hormones release, Locusta migratoria 5784.
- Desmiphora aegrata,**
new records, geographical distribution, USA, Texas 1944.
- Desmoma beuthia,**
life history, feeding behavior, migrations, nymphs, USA, California, Sagehen Creek 3668.
- Desmopachria,**
new taxa, morphology, taxonomy 3188.
- Desmopachria leechi,**
new species, taxonomy, morphology, USA, Florida 4791.
- Destruction,**
1460.
seeds, predators, Cirsium canescens, Paracantha culta, Orellia occidentalis, Homoeosoma stypticellum 9105.
- Detection,**
host plants, olfaction, larvae, Diabrotica virgifera virgifera 4413.
methodology, host plants pest resistance, Enosoma lanigerum, Malus 2962
methodology, parasites, Siphonaptera 2483.
methodology, parasites, vectors, Trypanosoma rangeli, Rhodnius prolixus 4486.
pest resistance, host plants, Ipomoea batatas, Diabrotica balteata 3719.
pests, spatial distribution, traps, mathematical models, Anthonomus grandis 2242.
reovirus, Drosophila melanogaster, Ceratitis capitata 1025.
starvation, thorax glucose levels, Apis mellifera 194.
stored products pests, traps, Insecta 3783.
traps, sex pheromone, bait, Anthonomus grandis 703.
- Determination,**
food quality, infestation, Insecta 3735.
- Deterrents,**
acids, biochemical analysis, infestation, Schizaphis graminum, Gramineae 532.
feeding behavior, host plants, Baccharis halimifolia, Trianthema barchardis 5956.
feeding behavior, host plants, Pinus sylvestris, Neodiprion sertifer 5952.
feeding behavior, host plants, Pristiphora erichsonii 623.
feeding behavior, leaves, Choristoneura rosaceana, Prunus persica 8501.
feeding behavior, oils, acids, biochemical analysis, Aleurites fordii, Anthonomus grandis 226.
feeding behavior, Tanacetum vulgare extracts, Lepidoptera 6742.
feeding, host plants, pest resistance, Sorghum bicolor, Schizaphis graminum 5294.
feeding, pests, oils, Anthonomus grandis 2252.
mating behavior, cuticle lipids, Glossina morsitans morsitans 8260
mating behavior, sex pheromone, homosexuality, Glossina morsitans, Musca domestica 224.
oviposition, intraspecific relationships, Rhagoletis basiola 1920.
oviposition, parasites, hosts plants, Hylemya 528.
oviposition, pheromones, host plants, competition, Hylemya 5856.

Deterrents, (continued)

- oviposition, pheromones, intraspecific relationships, resource partitioning.
Dacus cucurbitae 5850
 oviposition, pheromones, persistence, *Pieris brassicae* 217.
 oviposition, pheromones, population density, *Aethana soccata* 1908.
 oviposition, pheromones, *Rhagoletis zephyra* 8971.
 oviposition, plant extracts, *Lemma minor*, *Aedes aegypti* 5311.
 oviposition, plant extracts *Thupa plicata*, *Hyemla antiqua* 4352.
 pest resistance, host plants lipids, *Sorghum bicolor*, *Locusta migratoria* migratorias 5290.
Detritification
 isopropanol, enzymatic activity, population genetics, *Drosophila melanogaster* 761.
 mechanisms, pesticide resistance, permethrin, phrethroids, *Musca domestica* 1056.
 seeds, excretion, nitrogen, feces, *Caryedes brasiliensis* 3436.
 venom, antigenicity, *Apis mellifera* 5041.
Detritus
 food quality, effects on larvae growth, *Hydropsyche* 396.
 organic matter, streams, pollution effects, insecticides 7820.
 processing, prairies, soil microorganisms, *Arthropoda*, USA, Wisconsin 2287.
Deudorix epijarbas
 new records, crops infestation, India, Kashmir 3000.
 pest outbreaks, crop fields, India 5315.
Drosophila hypargyria philippinensis
 new species, taxonomy, morphology, Philippines 4891.
Detestation
 propyl cyclohexanecarboxylate, attractancy, *Blattella germanica* 3734.
Deuterophlebia sajanica
 new species, taxonomy, morphology, Mongolia 1629.
Developing countries
 biological control, disease transmission, vectors, *Insecta* 3666.
 environment management, pest control, conferences, *Insecta* 3957.
Development
 accessory gland, juvenile hormones, females, *Schistocerca gregaria* 2672.
 aflatoxins, *Drosophila melanogaster* 5803.
 air pollution effects on, sulfur dioxide, *Epilachna varivestis* 2153.
 alcohol dehydrogenase activity, *Drosophila melanogaster* 7481.
 analysis, genetics, temperature-sensitive mutant, *Drosophila melanogaster* 3102.
 anatomy, reproductive systems, *Musca domestica* nebulo 9036.
 antenna, larvae, *Tenebrio molitor* 9043.
 antibiotics, *Gossypium* extracts effects on, *Earias vitella* 6146.
 artificial diets, DIMBOA, effects on, *Ostrinia nubilalis* 9306.
 artificial diets, rearing, *Leucania separata* 2493.
 biology, *Tribolium freemani* 3916.
 biometrics, sexual reproduction, *Anopheles darlingi*, Brazil 7527.
 biotypes, mathematical models, *Heliothis zea*, USA 2695.
 blastoderm cells, embryogenesis, *Drosophila* 2670.
 body size, body weight, *Tribolium freemani* 8217.
 body weight, diets, larvae, pupae, *Heliothis virescens*, *Diatraea saccharalis* 1750.
 castes differentiation, methoprene, precocene, *Prothotermes simplex* 6647.
 castes, environmental effects, neuroendocrine system, *Apis mellifera* 3338.
 castes, juvenile hormones role, *Insecta* 6573.
 central nervous system, embryos, immunochemistry, markers, *Drosophila* 8913.
 colonies, termite construction, *Odontotermes formosanus* 2781.
 Culicidae, environmental effects, toxins, *Chlorella ellipsoidea*, aquatic environment 6691.
 cyclic GMP levels, *Tribolium castaneum* 9057.
 defective mutant, *Drosophila melanogaster* 765.
 diapause, ecdysteroids, *Heliothis virescens* 7437.
 diapause eggs, 20-hydroxyecdysone effects on, *Bombyx mori* 2675.
 diapause, environmental effects, seasonal variations, *Cirphis unipuncta*, *Laphygma exigua*, *Glyptotendipes* 7470.
 diapause, growth regulators, hypodermis, *Hypera postica* 1873.
 diets effects on, *Acrotelys insubricus* 2693.
 diets effects on, cholesterol chemical composition, *Bombyx mori* 2690.
 diets effects on, *Diaphania nitidalis* 1890.
 diets effects on, ecdysteroids, *Musca domestica* 7463.
 diets effects on, *Hercyniopsis femoralis* 6645.
 diets effects on, sterols, *Diatraea grandiosella* 3490.
 diets, food organisms effects on, *Cardiastethus nazarensis* 6651.
 diflubenzuron effects on, larvae, *Spodoptera mauritia* 5084.
 disruption, chemical control, bis (thiocarbamate) R-31026, juvenoid R-20458.
Tribolium confusum, *Tribolium castaneum* 6130.
 distribution, *Scaphytopius nudius* 8220.
 duration, mutation, *Bombyx mori* 7856.
 effects on ethidium bromide, *Drosophila melanogaster* 353.
 effects on, pathology, biological control, *Bacillus thuringiensis*, *Lepidoptera* 997.
 eggs cortex receptors, ovulation, *Drosophila* 1079.
 eggs, embryogenesis, follicles epithelium, *Heteropeza pygmaea* 334.
 eggs, *Hybonutia bimaculata*, Switzerland 6718.
 eggs, larvae, soil properties effects on, *Papilio japonica* 1864.
 eggs, males, females, temperature effects, *Apis mellifera* 1878.
 eggs, nymphs, *Corimelaena extensa*, USA, California 8290.
 eggs, overwintering, environmental effects, soil temperature, *Diabrotica virgifera virgifera* 1863.
 eggs, spermatocyte storage, *Baculum* 6654.
 eggs, strains, cytoplasmic inheritance, *Aedes polynesiensis* 1542.
 eggs, temperature, *Enallagma ebrium*, *Enallagma vernale* 7025.
 embryogenesis, juvenoids effects on, *Earias fabia* 5828.
 embryogenesis, nervous system, muscles, *Periplaneta americana* 5812.
 embryogenesis, *Periplaneta americana* 5070.
 embryology, *Arthropoda* 3459.
 embryos, gene expression, *Saturidae* 3884.
 embryos, parthenogenesis, *Baculum* 5810.
 embryos, radiation, oxygen effects on, radiation 1120.
 emergence, temperature effects on, *Rhagoletis indifferens* 5834.
 endocrine system, ecdysteroids, ovaries, *Bombyx mori* 4162.
 energetics, temperature effects, migration, *Oncopeltus fasciatus*, *Lygaeus kalmii* 2743.
 environmental effects, aggregation, crowding, *larvae*, *Arge nigrinodosa*, *Arge nipponeus* 2696.
 environmental effects, *Ctenopcephalodes felis* 359.
 environmental effects, temperature, diets, larvae, *Tribolium confusum* 2687.
 environmental effects, temperature, larvae, Pupae, caste differentiation

Development, (continued)

- Polistes federatus* 4315.
 enzyme polymorphism, dose-response effects, insecticides, larvae, *Choristoneura occidentalis* 4229.
 fat body, enzymatic activity, *Bombyx mori* 3509.
 fat body, sensitivity, photoperiod, diapause, *Henosepilachna vigintioctopunctata* 7456.
 fecundity, effects on host plants growth, *Nilaparvata lugens* 1288.
 fecundity, food plants effects on, *Pterobelaus darlingtoni*, *Pterobelaus alternatus* 7510.
 fecundity, host plants, artificial diets, *Spodoptera frugiperda* 6169.
 fecundity, oviposition, predator-prey interactions, *Galendromus longipilis*, *Neoselusus fallax*, *Phytoseiulus macropilis*, *Propioseius tamperellus*, *Tetranychus urticae* 362.
 fecundity, survival, temperature effects, *Sturmopsis inferens* 2683.
 fecundity, *Zea mays* grain, *Sitotroga cerealella* 6102.
 feeding behavior, social environmental effects on, *Acheta domesticus* 8275.
 feeding, temperature, predation, mathematical models, *Adalia bipunctata* 6018.
 flight muscle, mechanical stimuli effects on, *Anastrepha suspensa* 8228.
 flight muscle, *Telegonyllus oceanicus* 6521.
 flight muscles, neuromuscular junctions, structures, *Manduca sexta* 8910.
 food plants, association, *Myrica gale*, *Bucculatrix cidarella* 9159.
 food plants effects on, *Cucurbitaceae*, *Aulacophora foveolalis*, *Aulacophora atripennis* 9167.
 food plants, effects on, *Sitotroga cerealella* 379.
 food plants, food preferences, *Callosobruchus chinensis* 7433.
 food plants, *Triophidia annulata* 2836.
 foraging behavior, environmental conditions, *Ixodes ricinus*, *Eire* 5898.
 gene expression, proteins, cuticle, *Drosophila melanogaster* 3911.
 genetic control, *Drosophila melanogaster* 5836.
 geographical variations, *Lithobius crassipes*, Sweden 5071.
 grains effects on, *Sitophilus zeamais*, *Tribolium castaneum* 9048.
 growth, carvone effects on, diets, *Spodoptera littoralis* 8231.
 growth, diets effects on, yeasts, *Dacus cucurbitae* 7447.
 growth, food plants effects on, *Diarsia oblique* 7734.
 growth, food preferences, food plants, *Callosobruchus chinensis* 7433.
 growth, hosts, pathogens effects on, *Farnococcus tinfoili*, *Tribolium castaneum* 1027.
 growth, life cycle, *Odontococcus albicornis*, British Isles, England 4660.
 growth, morphology, nymphs, *Dialeurodes dissimilis* 7432.
 growth, ommatidia, compound eyes, *Blattodea* 141.
 growth, pests, food plants effects on, *Callosobruchus maculatus* 7737.
 growth, pests, *Leptocryptus* flour effects on, *Callosobruchus maculatus* 7772.
 growth regulators effects on, *Aedes aegypti*, *Rhodnius prolixus* 9054.
 growth regulators effects on, alloloid, dimulin, *Culex pipiens* 1042.
 growth regulators, RO 13-5223, effects on, *Chrysomelus aeneus*, *Aonidiella auranti*, *Saussurea oleae*, *Ceroplastes floridensis* 6642.
 growth temperature effects, *Dermetes maculatus* 1871.
 growth, *Vigna mungo* flour effects on, *Callosobruchus chinensis* 7763.
 head, embryos, protein effects on, *Sitotroga* 1085.
 hormones, plasma levels, *Locusta migratoria* *cicerensis* 4163.
 host plants alkaloids effects on, *Lophocarenum schotti*, *Drosophila mettleri* 4389.
 host plants chemical composition effects on, *Dacus oleae* 7607.
 host plants effects on, nutrient availability, *Brassica nigra*, *Pieris rapae*, *Spodoptera eridania* 5960.
 host plants effects on, parasites, *Trialeurodes vaporariorum*, *Encarsia formosa* 7338.
 host plants effects on, pest resistance, *Helianthus*, *Empoasca abrupta* 2090.
 host plants effects on, pest resistance, *Heliothis virescens*, *Gossypium* 6191.
 host plants effects on, rearing, *Dendroctonus ponderosae*, *Pinus* 5975.
 host plants, *Ollianthus bali*, *Jamaica* 5892.
 host plants pest resistance, *Solanum berthaultii*, *Solanum tuberosum*, *Leptotetrastia dechneana* 8548.
 host plants, *Brevicoryne brassicae* 3830.
 host plants varieties, pests, *Amrasca devastans*, *Earias vitella*, *Gossypium* 7791.
 host-parasite interactions, effects on hosts, *Mantispa uhleri*, *Lycosa rabida* 4369.
 hosts, parasites effects on, *Copidosoma truncatellum*, *Triophlusia ni* 8327.
 hosts, parasites, venen effects on, *Hymenoptera* 502.
 hosts, parasitoids effects on, *Apaneltes smethurii*, *Manduca sexta* 8328.
 hyperparasitism, food preferences, *Microterys flavus*, *Cheloneurus paralia* 5185.
 hyperparasitism, *Microterys flavus*, *Mareta javensis* 5184.
 hyperparasitism, *Microterys flavus*, *Pachyneuron concolor* 5177.
 immature stages, diets, *Diatraea grandiosella* 1748.
 immunology, *Drosophila melanogaster* 3502.
 indole-3-acetic acid effects on gonads, *Dacus dorsalis* 8227.
 infectious diseases, *Neoglyphis scabra*, man, *Acan* 3659.
 instars, cytology, epithelium, *Locusta migratoria* 3465.
 instars, polymorphism, *Macrotermes muelcheli* 435.
 integrated control, resource management, socio-economic aspects 5385.
 isoenzymes, glycerol-3-phosphate dehydrogenase (NAD⁺), *Homionella vitripennis* 6553.
 junctions, follicles, oogenesis, *Rhodnius prolixus* 1130.
 juvenile hormones analogs effects on, *Insecta* 2258.
 juvenile hormones synthesis, corpora allata, *Manduca sexta* 5826.
 labelling cells, gene expression, clones, *Drosophila* 757.
 larvae, benzamide effects on, *Stomoxys calcitrans* 1128.
 larvae, biochemistry, β -D-glucopyranosyl-O-L-tyrosine, *Plodia interpunctella*, *Ephestia cautella*, *Thyridopteryx ephemeraformis* 6519.
 larvae, body size regulation, *Blattella germanica* 7210.
 larvae, *Brachytherus contaminata* 8280.
 larvae, *Chelonus insularis* parasitoids effects on, *Heliothis virescens*, *Spodoptera ornithogalli* 4379.
 larvae, crowding effects on, *Epiphyas postvittana* 6011.
 larvae, crowding effects on, mortality, *Otiorynchus sulcatus* 431.
 larvae, ecological distribution effects on, *Helimela olivacea* 604.
 larvae, *Entomoseia americana*, diets, *Brassica campestris*, *Brassica napus* 2076.
 larvae, enzymatic activity, alanine aminotransferase, *Drosophila nigromelana* 2728.
 larvae, enzymatic activity, genetic factors, *Drosophila melanogaster* 1541.
 larvae, grain, *Rhyzopertha dominica*, *Zea mays* 5946.
 larvae, granulosis virus effects on, biological control, *Pieris rapae* 2942.
 larvae, host plants, chemical composition, *Aedes triseriatus* 6818.
 larvae, host plants effects on, *Tribolium aestivum*, *Metopolophium dirhodum* 2840.
 larvae, host plant role, *Anticarsia gemmatilis* 2067.

Development, (continued)

- larvae, molting hormones. *Proceane II*. *Rhodnius prolixus* 1882
 larvae, overwintering. *Thanosmita dubius* 9084
 larvae, oviposition mistakes; host plants toxicants. *Papilio glaucus*, *Angelica atropurpurea* 8247
 larvae, parasites, mass rearing. *Pales pavidus*, *Galleria mellonella* 510
 larvae, parasites. *Onchocerca tarsicola*, *Diptera* 662
 larvae, pathogens effects on, nuclear polyhedrosis virus. *Bacillus thuringiensis*, *Heliothis armigera* 7377
 larvae, pest resistance. *Sorghum*, *Athergona soccata* 4565
 larvae, precocene I, precocene II effects on. *Locusta migratoria* 1049
 larvae, protein biosynthesis. salivary gland. *Drosophila melanogaster* 8111
 larvae, pupae, hormones, prothoracicotropic hormone, circadian rhythms. *Samia cynthia ricini* 1446
 larvae, salinity effects. *Anopheles menus*, Kenya 3616
 larvae, *Sciopterus obscurus*, USA, Oregon 448
 larvae, survival. *Parschnogaster mellyi* 3551
 larvae wing discs. *Drosophila* 339
 life cycle, *Corticeus glaber* 6724
 life cycle, diapause. *Kodes persulcatus* 9096
 life cycle, oviposition. survival. *Argas persicus* 1181
 life cycle, population dynamics, chemotaxis, hosts. *Simuliidae*, *Mammalia* 1190
 life cycle, stored products pests. *Callosobruchus maculatus* 5314
 life history, *Amblyseius citrifolius* 6719
 life history, behavior. *Dysodia sica*, Panama 1986
 life history, bionomics. parasitoids. *Euplectrus kuwanae*, *Argyrogramma albomaculata* 1223
 life history. *Empoasca foliici*, Nigeria 2772
 life history. *Euphranta connexa* 4323
 life history, host plants. *Batis arcturibor*, *Portulacaceae* 6809
 life history, overwintering. *Operophtera occidentalis*, USA, Oregon 8282
 life history, parasites. *Aleochara moesta*, *Musca domestica* 6775
 life history, vectors. *Aedes triseriatus* 308
 life-term effects, photoperiod, temperature, climatic conditions. *Pterostichus nigrita* 7443
 longevity, fecundity. *Toxorhynchites amboinensis* 439
 malpighian tubules, imaginal discs transplantation. *Galleria mellonella* 6632
 markers, juvenile hormones, enzymatic activity. *Trichoplusia* 21723
 mass rearing. *Anisochrysa carnea* 4250
 mating behavior, sexual isolation. *Dacus dorsalis* 8261
 molting, hormones. *Rhodnius prolixus* 5002
 molting, hypoph. *Hemisaroptes cocophagus* 7435
 molting, morphogenesis, monitoring methodology. *Ostrinia nubilalis* 8211
 morphogenesis, photoperiod effects on. *Euschistus tristigmus tristigmus* 7462
 morphology, α radiation effects on. *Dacus cucurbitae* 2705
 morphology, compound eyes. *Periplaneta americana* 3296
 morphology, esophageal bulb. *Rhagoletis pomonella* 8076
 morphology, gynandromorphs. *Spevna diana* 8654
 morphology, instars. *Marcia testulalis* 74
 morphology, larvae. *Athergona soccata* 558
 morphology, larvae. *Neuroptera* 8878
 morphology, morphogenesis. *Lathrobium microps* 4251
 morphology, pericarp. *Helianthus annuus*, infestation. *Neolusioptera helianthi* 2074
 mortality, environmental effects, temperature, relative humidity. *Coryca cephalonica* 1127
 mortality, predators, foraging behavior, larvae. *Chrysopa carnea*, *Hippodamia convergens* 2870
 mouthparts, nutrition, effects on. *Cyclorhapha* 381
 muscles, ultrastructure. *musci*, *Bombix mori* 7281
 mutants, gene expression. *Drosophila* 8642
 mutation, weightlessness. *Tribolium castaneum* 1108
 mycotoxins, effects on. *Drosophila melanogaster* 4212
 nerves, muscles, leg. embryos. *Periplaneta americana* 8216
 nests, colonies. *Vespula maculifrons*, *Vespula germanica*, *Vespula vulgaris*, *Vespula vidua* 8592
 nervous, muscles, instars, adults. *Locusta migratoria* 3277
 neurons, neurotoxins, receptors. *Scorpionella* 8209
 nerve cells, oogenesis. *Ephestia kühniella* 5098
 nutrient deficiencies, pyridoxine, vitamins, larvae. *Heliothis virescens* 1744
 nutrients, media (culture), rearing. *Coryca cephalonica* 7452
 nymphs, eggs, temperature effects, *Ortus insidiosus* 1865
 nymphs, nests, synchronization. *Odonotermes stercoreator* 6997
 nymphs, temperature effects on. *Chelidonia vittiger* 6644
 oligopause, light intensity, wavelength. *Aleyrodes asari* 7464
 oocytes, vitellogenesis. *Jonespeltis splendens* 9061
 ovary, age determination methodology. *Culicidae* 8849
 ovary, autogeny. *Chrysops*, USA, New England 1131
 ovary, blood meals effects on. *Stomoxys calcitrans* 3497
 ovary, dispersal, flight activity. *Hippodamia convergens* 5211
 ovary, dispersal flight. *Hippodamia convergens* 9171
 ovary, effects on brain neurosecretion. *Acheta domestica* 984
 ovary, juvenile hormones, brain hormones. *Aedes aegypti* 3488
 ovary, larvae, polyolipids, histology. *Bombix mori* 1087
 ovary, oviposition, races. *Apis mellifera* 4279
 ovary, precocene II effects on. *Oryza jaya* 1115
 ovary, sensitivity, growth regulators. precocene II. *Pyrrhocoris opterus* 8225
 ovary, thiopea effects on. *Sarcophaga ruficornis* 357
 ovary, workers. *Formica sanguinea* 3505
 oviposition, host plants. *Balanogaster kolae*, *Cola acuminata*, *Cola verticillata* 8352
 oviposition, life cycle, temperature effects. *Acrotichis intermedia* 2686
 oviposition, mating behavior. life history. *Lamproleptus* 1187
 oviposition. *Phytoseiulus persimilis*, *Arabisyleus degenerans* 1870
 oxygen effects on, larvae. *Drosophila melanogaster* 7453
 parasites, diflubenzuron effects on. *Biosteres longicaudatus*, *Anastrepha suspensa* 357
 parasites, *Gastromus*, *Aedes aegypti*, *Culex pipiens fatigans*, *Anopheles stephensi* 5740
 parasites, *Hepatizon erhardovae*, *Siphanoptera* 4183
 parasites, hosts effects on. *Muscidifurax raptor*, *Spalangia drosophilae*, *Diptera* 2116
 parasites, hosts population density. *Galleria mellonella*, *Gonia cinerascens* 2829
 parasites, larvae effects on. *Bracon brevicornis* 509
 parasites, *Litomosoides carinii*, *Ornithonyssus bacoti* 2634
 parasites, sampling methodology. *Ooencyrtus kuwanae* 2821

Development, (continued)

- parasites, temperature effects on. *Gonia cinerascens*, *Galleria mellonella* 6772
 parasites. *Trichogramma brevicapillum* 7422
 parasitoids, hosts age effects on. *Coccophymus turionellae* 8330
 parasitoids, hosts physiology effects on. *Biosteres longicaudatus*, *Anastrepha suspensa* 9135
 parasitoids, nutrition. *Brachymeria intermedia*, *Coccophymus turionellae*, *Lymantria dispar* 8326
 pathogens effects on, biological control. *Nosema algerae*, *Anopheles stephensi* 739
 pathogens, infection. *Parafilaria bovicola*, *Musca xanthomelas*, *Musca lusoria* 5725
 pathogens, *Nosema apis*, *Apis mellifera* 4210
 phototropic membranes synthesis, ultrastructure, electron microscopy (scanning), *Trichoplusia* 3140
 pesticide resistance, carbamate. *Nilaparvata lugens* 320
 pesticide resistance effects on, strains. *Musca domestica* 8197
 pesticide resistance, malathion, migrations effects on. *Culex pipiens* 319
 pests, breeding sites, host plants. *Scolytus multistriatus*, *Ulmus procera* 6195
 pests, galls. *Dasineura lonicus*, USSR, Siberia 6940
 pests, host plants, resistance, susceptibility. *Medicago sativa*, *Therioaphis trifolii* 7757
 pests, host plants, winter. *Myzus persicae*, India, Simla 7746
 phase variations, larvae. *Spodoptera exempta* 577
 phenology, population studies. *Diatraea grandiosella* 6831
 Phycolysis guilfoylei extracts effects on, biochemical characteristics. *Dysdercus cingulatus* 6650
 population dynamics, oviposition, pest resistance. *Solanum berthaultii*, *Lepontaria decemlineata* 4407
 population growth, grain. *Sitophilus zeamais*, *Tribolium castaneum* 5344
 precocene effects on. *Cimex lectularius* 374
 predation, eggs. *Epicauta atrata*, *Epicauta pennsylvanica* 6839
 protein biosynthesis, imaginal discs. *Drosophila melanogaster* 3507
 proteins, testes. *Tenebrio molitor* 3520
 pupae, host plants distribution. *Hypocysta adiantae*, *Xoia arctus* 1244
 γ radiation effects on, larvae, pupae. *Dacus dorsalis* 7448
 rate, temperature. *Arctocoris carinata*, *Callicorixa producta* 4265
 rate, temperature effects on, life history. *Arthropoda* 5833
 rates, variation. *Tribolium castaneum* 1088
 rearing. *Coryca cephalonica* eggs, UV radiation, temperature effects on. *Lepontaria brasiliensis* 7450
 rearing. *Onchocerca volvulus* vectors. *Simulium damnosum* 5058
 rearing, population dynamics, survival. *Spodoptera exempta*, Kenya 1310
 rearing, survival. *Blissus leucopertus* 65
 reproduction, life history. *Bedellia somnulentella* 6727
 reproduction, life history. *Philonthus longicornis* 6726
 reproduction, life history. *Philonthus longicornis* 6726
 reproduction, temperature effects, *Lobesia botrana* 352
 reproductive organs, accessory gland. *Schistocerca gregaria* 5062
 reproductive organs, juvenile hormones effects on. *Danau plexippus* 2713
 reproductive systems, blood meals. *Mansonia richiardi* 9058
 respiratory system, larvae. *Sarcophaga bulbata* 919
 retina, neurons. *Blattodea* 898
 selection, media (culture), population genetics. *Tribolium castaneum* 1980
 species composition, fungi association. *Phoridae*, British Isles 9107
 sterols effects on. *Glossina morsitans* 355
 sterols. *Lygaeus militaris* 7479
 storage proteins, vitellogenin, developmental stages. *Bombix mori* 3498
 stored products pests, whey-soy drink mix. *Insecta* 9323
 strains, geographical distribution, temperature effects. *Simulium decorum*, USA 2793
 survival, eggs, larvae. *Sirex noctilio* 3470
 survival, food plants. *Trilophidia annulata* 5201
 survival, larvae, culture effects on. *Ostrinia nubilalis* 3485
 survival, pathogens effects on, diets. *Aedes aegypti*, *Smittium culicetiae* 2645
 temperature, diets effects on. *Loxostege commixtalis* 1859
 temperature effects. *Cylas formicarius elegantulus* 1876
 temperature effects, eggs. *Heliothis armigera* 1124
 temperature effects. *Haematobia irritans irritans* 2692
 temperature effects. *Liriomyza sativae* 1869
 temperature effects on. *Bruchidea* 8224
 temperature effects on. *Epicauta atrata*, *Epicauta pestifera*, *Epicauta vittata*, *Epicauta immaculata*, *Epicauta occidentalis* 9125
 temperature effects on, fecundity. *Spodoptera littoralis* 7460
 temperature effects on. *Hylemyia platara*, 8239
 temperature effects on. *Oligonychus subnudus*, *Oligonychus mulleri* 8283
 temperature effects on, parasites. *Encarsia formosa*, *Trialetodes vaporariorum* 5823
 temperature effects on, phenology. *Spodoptera frugiperda* 6031
 temperature effects on, predators. *Cybocephalus micanis*, *Cybocephalus nigriceps nigriceps* 7505
 temperature effects on, *Schizaphis graminum* 6485
 temperature effects. *Pendromora saucia* 2685
 temperature effects. *Psila rosae* 2697
 temperature effects. *Pterohelaeus darlingtonis*, *Pterohelaeus alternatus* 3545
 temperature effects, simulation. *Popillia japonica* 367
 temperature, host plants. *Cynodon dactylon*, effects on. *Spodoptera frugiperda* 556
 temperature, larvae. *Lepidopteryx mali* 8219
 temperature, relative humidity, effects on. *Chilo auricilius* 9050
 temperature requirements, parasites. *Microctonus chertoni* 3492
 temperature requirements. *Tetranychus urticae* 3555
 temperature threshold. *Micromus tasmaniae* 1111
 testes, spermatogenesis. *Calpodus ethiops* 9065
 testes, spermatogenesis, cell cycle. *Dermacentor variabilis* 2719
 testes, spermatogenesis. *Papilio xuthus* 4272
 thorax, bithorax genes, gene expression. *Drosophila melanogaster* 4674
 time, cages effects on. *Drosophila melanogaster* 385
 time, comparison, larvae, pupae, sex differences. *Heliothis zea*, *Heliothis virescens* 1089
 time, geographical distribution effects on. *Apis mellifera* 375
 trehalase activity. *Dysdercus koenigii* 8941
 tympanum, receptors, cells, scolopidium, larvae. *Locusta migratoria* 8218
 ultrastructure, oocytes, *Hypoderma* 5096

Development, (continued)

- variation, host-parasite interactions, clones, *Solidago*, *Uroleucon calgatum* 5963.
- venom, hyperparasitism, *Apidius smithi*, *Asaphes lucens* 2820
- ventral gland, ultrastructure, embryogenesis, *Carassius* 5596
- water temperature effects on, immature stages, *Anopheles culicifacies*, Pakistan, Punjab Province 6697.
- wing discs, cells, morphology, larvae, *Drosophila* 7429.
- wings, biometrics, genetic control, *Drosophila* 3503.
- Developmental genetics,**
- enzymes, electrophoresis, body length, *Tabanus nigrovittatus* 2336.
- morphology, taxonomy, Aphididae 2335.
- mutation, wings, *Drosophila* 1523.
- RNA polymerase II, temperature-sensitive mutant, *Drosophila melanogaster* 9418.
- Developmental programs,**
- apiculture, Colombia 6206.
- Developmental stages,**
- abundance, ectoparasites, *Florinia externa*, *Tsuga canadensis*, USA, Pennsylvania 437.
- aldehyde oxidase activity, *cin* gene, heterozygotes, *Drosophila melanogaster* 7857.
- amino acid composition, metabolism, *Schistocerca gregaria* 1752.
- amino acids, metabolism, *Gilpinia heroyana* 7318.
- biocoaccumulation, development, storage proteins, vitellogenin, *Bombyx mori* 3498.
- biochemistry, lipoproteins, indicators, phenotypes, *Galleria*, *Isotoma ugrina* 4155.
- biology, *Platyptilia pica* 1727.
- cations variation, hemolymph, *Bombyx mori* 5673.
- community composition, succession, lakes, *Coleoptera*, Sweden 3857.
- Corpora allata, histology, physiology, *Acheta junata* 4176.
- crops damage, population density, *Teleogryllus commodus* 3827.
- cyclic, proteins, biochemical analysis, *Locusta migratoria migratoroides* 4120.
- cycloheximide toxicity, *Drosophila melanogaster* 8196.
- digestive enzymes, *Heteropneustes fossilis* 2569.
- duration, life history, algorithms, *Insecta* 5628.
- physiology, deserts, temperature effects on oxygen consumption, *Arthropoda*, *Insecta* 5710.
- effects on susceptibility, pesticides, *Boophilus microplus* 293.
- eggs, biochemical composition, fatty acids, *Spodoptera littoralis* 1082.
- embryogenesis, diapause, hormones molting, *Bombyx mori* 3463.
- embryogenesis, parasitoids, *Mormoniella vitripennis* 5068.
- embryogenesis, phylogeny, *Neomimomyia nipponensis* 330.
- energy budget, nutrient utilization, production, assimilation, *Oryzaephilus surinamensis* 173.
- energy resources, metabolism, *Stomoxys calcitrans* 4159.
- enzymatic activity, γ -glutamyltransferase, pesticide resistance, *Musca domestica* 947.
- enzymatic activity, diets effects on, *Hyalophora cecropia* 201.
- fatty acid composition, diets lipids, *Pectinophora gossypiella* 167.
- feeding behavior, *Culicoides melleus*, *Culicoides hollensis* 2009.
- germ cells, radioresistance, genetic factors, *Drosophila melanogaster* 2314.
- heat shock proteins, biosynthesis, *Drosophila melanogaster* 5686.
- herbicides, dinoseb-acetate, toxicity, effects on, *Culex pipiens* 682.
- hormones, carbon dioxide effects on, *Locusta migratoria migratoroides* 3341.
- host plants, host-parasite interactions, assimilation, *Pyrenia sinica*, Japan 981.
- identification, body length, *Phasmida* 6494.
- infection, *Babesia bigemina*, *Boophilus microplus* 8983.
- instars, bionomics, *Simulium chutteri* 8880.
- instars, morphology, *Apache degeeri* 3254.
- instars, *Rhyacionia rigdana* 6723.
- juvenile hormones, *Leptinotarsa decemlineata* 4164.
- juvenile hormones, measuring techniques, radioimmunoassay, *Insecta* 2587.
- larvae, molting hormones, radioimmunoassay, *Sarcophaga bullata* 2717.
- larvae, morphology, *Aenetus virescens* 4098.
- lateral neurosecretory cells, peritrichal glands, morphology, histology, *Argas arboreus* 8069.
- life history, *Agromyza frontella*, Canada, Ontario 2782.
- life history, *Dysodia sicca*, Panama 1986.
- life history, rearing, controlled conditions, *Epilachna varivestris* 441.
- life history, taxonomy, *Centrophlebotomyia furcata*, Israel 4002.
- lipid composition, *Athalia proxima* 3233.
- metamorphosis, *Drosophila melanogaster* 3460.
- metamorphosis, molting, hormones, *Manduca sexta* 967.
- molting, cuticle excretions, *Oniscus asellus* 4273.
- molting hormones, role, coloration, *Sarcophaga bullata* 3361.
- molting, pharate condition, pupae, *Tipula paludosa* 4249.
- morphogenesis, growth rate, *Pectinophora scutiger* 3464.
- morphology, *Bunaea alcinde* 7262.
- morphology, comparative studies, *Asilidae* 77.
- morphology, *Cixia pennsylvanica* 3253.
- morphology, *Cydia pyrachia* 434.
- morphology, *Eurycnemus crassipes* 4928.
- morphology, feeding, *Hydroecia nordstroemi* 3255.
- morphology, females, keys, *Saissetia coffeae* 1705.
- morphology, galls, *Tortricids* 4422.
- morphology, keys, *Protopulvinaria pyriflorum* 4097.
- morphology, life cycle, feeding behavior, *Ceraclea nigronervosa*, Norway 5429.
- morphology, *Liponeura bezzi* 1712.
- morphology, *Monosteira* 1636.
- morphology, new species, *Prodiamesa levandovae*, USSR, Teploye L. 6389.
- morphology, *Oxyopus lateralis* 4931.
- morphology, *Parasarcophaga reposta* 4927.
- morphology, *Paramea trimella*, *Paramea torquellula* 8871.
- morphology, *Pernis arpa*, Venezuela 2777.
- morphology, polymorphism, males, *Polystomophora ostioplurima* 2500.
- morphology, *Pronotomus mitratus* 864.
- morphology, *Pterostichus panzeri* 6706.
- morphology, *Schizaphis graminum* 6485.
- morphology, *Simulium sanguineum* 3252.
- morphology, taxonomy, *Archithremna uliciferus* 4936.
- mortality, crop fields, *Anthonomus grandis grandis*, Gossypium, USA, Texas 6125.
- mortality, environmental effects, *Oulema melanopus* 1112.
- mortality, population dynamics, *Chorticoetes terminifer* 7601.
- mortality, predators, *Musca vetustissima*, *Arthropoda* 2880.
- niche pattern, feeding behavior, yeasts attractancy, *Drosophila buzzatii* 1403.
- Drosophila aldrichi* 1403.
- occurrence, seasonal variations, population density, *Aedes albopictus*, Japan,

Developmental stages, (continued)

- Okunawayma* 5897.
- ontogeny, *Dolichovespa saxonica* 6636.
- ovary, anatomy, histology, aging methods, *Pediculus humanus* 4242.
- parasites, bees, *Aeroglyphus robustus*, *Apis mellifera* 2026.
- parasites, biological control, suitability tests, *Chilo arvensis* 1217.
- parasites, susceptibility, diflubenzuron, *Bioester longicaudatus*, *Anastrepha suspensa* 357.
- parasitoids, *Prokelisia marginata*, USA, Florida, Oyster Bay 4368.
- pest resistance, host plants, *Zea mays*, *Ostrinia nubilalis*, *Agrotis ipsilon* 6914.
- polymorphism, colonial characteristics, *Macrotermes michaelsen* 435.
- polymorphism, temperature effects, *Chaoborus americanus* 568.
- polynucleotides, mRNA, nucleotide sequence, homology, *Drosophila melanogaster* 1539.
- population dynamics, gynoparae, *Rhopalosiphum padi*, Finland 5226.
- predation, mortality, *Gastrophysa polygona*, British Isles 8396.
- predator-prey interactions, pests, biological control, predation, *Orius insidiosus*, *Sericothrips variabilis* 2138.
- protein biosynthesis, hemolymph, fat body sequestering, *Calpodus ethlius* 6557.
- protein biosynthesis, salivary gland, puffing, *Chironomus tentans* 2302.
- protein biosynthesis, translation errors, *Drosophila melanogaster* 1536.
- prothoracic gland cells, physicochemical properties, ionic exchange, *Galleria mellonella* 6591.
- pure culture, galactose enzymatic activity, *Drosophila melanogaster* 165.
- radioimmunoassay, juvenile hormones, molting hormones, *Choleva angustata* 205.
- RNA biosynthesis, juvenile hormones effects on, *Galleria mellonella* 7862.
- mRNA, content, *Drosophila melanogaster* 1493.
- salivary gland, morphology, toxins, *Ixodes holocyclus* 1800.
- seasonal variations, *Poplilia japonica*, USA, North Carolina 600.
- sensitivity, juvenile hormones, prothoracic glands, *Mamestra brassicae* 3387.
- separation techniques, methodology, *Culex* 69.
- sexual dimorphism, *Reticulitermes flavipes* 5634.
- spatial distribution, effects on pest control, *Bathycorallia thalassina* 581.
- spatial distribution, ponds, cannibalism, *Notonecta lunata*, *Notonecta undulata* 7017.
- starvation survival, *Malles gregalis* 1212.
- stridulatory apparatus morphology, *Triatoma infestans* 70.
- susceptibility, growth regulators, pest control, *Chironomus occidentalis* 9321.
- survival, temperature effects, *Haemaphysa irritans irritans* 2692.
- survival, temperature effects, storage, *Amibiomyia americana* 1129.
- susceptibility, parasites, infection, *Romanomeris culicivox*, *Culex pipiens* 1438.
- susceptibility, pyrethroids, *Culex pipiens* 310.
- taxonomy, morphology, *Chloperla* 1672.
- toxicity, rose bengal, erythrosin B, chemical control, *Musca autumnalis* 2233.
- weeds, attack, *Pteropion antiquum*, *Emex australis* 5205.
- Deslogia forticornis,**
- new records, geographical distribution, German Dem. Rep., Potsdam, Rietzer See 4711.
- Diabrotica,**
- antifeedants, plant protection 2976.
- biological control, pest control, predators, *Carabidae* 6086.
- eggs, biological control, predators, *Solenopsis geminata*, phleoid, Costa Rica 2993.
- pests, life cycle, damage, crop fields 7715.
- soil fauna, extraction methodology 2488.
- Diabrotica adelpha,**
- disease transmission, vectors, bean curly dwarf mosaic virus, bean mild mosaic virus, Costa Rica 7658.
- Diabrotica batatas,**
- abundance, diurnal variations, *Ipomoea batatas* crop fields 4535.
- biological control, mass rearing methodology, parasites, *Philippinermis leipadana* 8494.
- disease transmission, vectors, bean curly dwarf mosaic virus, bean mild mosaic virus, Costa Rica 7658.
- feeding, crop damage 9347.
- feeding, effects on crops, *Phaseolus vulgaris* 4609.
- pest control, effects on crop yield, *Cucurbita pepo* 4567.
- pest control, *Phaseolus vulgaris* 709.
- pest resistance, host plants, detection methodology, *Ipomoea batatas* 3719.
- Diabrotica cristata,**
- diapause, eggs 8221.
- Diabrotica longicornis,**
- chemical control, insecticides, carbosulfan, persistence, soil 8521.
- diapause, eggs 8221.
- larvae, crop fields damage, soil pesticide residues effects on 3740.
- oviposition, site preferences, host plants, *Zea mays* 6966.
- population levels, sampling methodology, crop fields, *Zea mays* 6120.
- spatial distribution, dispersion, crop fields, *Zea mays*, USA, Iowa 6118.
- Diabrotica longicornis longicornis,**
- diapause, eggs 8221.
- Diabrotica undecimpunctata,**
- toxicity testing, insecticides, soil bioassays, larvae 4220.
- viruses, characterization, isolation, blood 1824.
- Diabrotica undecimpunctata howardi,**
- toxicity, insecticides 8194.
- Diabrotica undecimpunctata undecimpunctata,**
- toxicity testing, insecticides, pest control 8189.
- Diabrotica virgifera,**
- diapause, eggs, infestation, hatching, damage, crop production 691.
- larvae, crop fields damage, soil pesticide residues effects on 3740.
- oviposition, site preferences, host plants, *Zea mays* 6966.
- Diabrotica virgifera virgifera,**
- diapause, eggs 8221.
- environmental effects, soil temperature, overwintering eggs development 1863.
- host plants detection, olfaction, larvae 4413.
- pest resistance, infestation damage, *Zea mays* 6117.
- pest resistance, measuring techniques, roots damage, *Zea mays* 6915.
- toxins, insecticides 8194.
- Diabrotica virgifera zeae,**
- diapause, eggs 8221.
- Diachasma scutellipes apoides,**
- forests, fires, environmental change, effects on species composition 6840.
- Diachasma alioleum,**
- parasitism, pupae, *Rhagoletis pomonella*, USA, Connecticut 2819.

- Diachasma ferrugineum**, parasitism, pupae, *Rhagoletis pomonella*, USA, Connecticut 2819.
- Diachlorus**, new species, 5 species, morphology, keys, new records, geographical distribution, South America 7970.
- Diaceria obliqua**, activity patterns, diel variations, India 9100.
- growth, development, food plants effects on 7734.
- hemolymph, amino acids, larvae 7306.
- juvenile hormone, corpora allata, effects on growth, morphology, larvae, pupae 7475.
- larvae, host plants associations, food preferences, cannibalism 1209.
- larvae, mortality, biological control, pathogens, *Bacillus thuringiensis* 2985.
- larvae, pathogenicity, *Phaeomonon larniosus* 1001.
- larvae, pest control, antifeedants, efficiency 1462.
- moulting, mortality, larvae, food plants effects on 7561.
- nuclear polyhedrosis virus infection, mortality 7389.
- pest control, biological control, *Bacillus thuringiensis* 5307.
- pest control, chemical control, insecticides 7702.
- Diadisia afflicta**, pollinators, foraging behavior, nesting behavior, USA, Texas 9358.
- Diadegma**, parasites, mortality, *Synanthedon salmactus*, New Zealand 4415.
- Diadiplosis coci**, predators, biocontrol, life cycle, *Saissetia hemisphaerica* 9094.
- Diadromus pulchellus**, reproductive organs, anatomy, role, sex determination 3504.
- Diaretella rapeae**, predators, host plants effects on, *Myzus persicae* 723.
- Diaretus rapeae**, parasites, infestation, seasonal variations, *Lipaphis erysimi*, India, Madhya Pradesh 6767.
- Diagnosis**, dengue, dengue virus, *Aedes albopictus* cell culture, man 9224.
- medical importance, ova hatching, *Sarcoptes scabiei* 3668.
- methodology, infection, man, *Arthropoda* 9222.
- symptoms, parasites, *Sarcoptes scabiei* hominis 9269.
- Dialeurodes citri**, biological control, integrated control, pest control, Italy 3722.
- Dialeurodes dissimilis**, growth, development, morphology, nymphs 7432.
- Dialictus**, Dufour's gland, secretion, chemical analysis 988.
- Diamanus montanus**, pest control, repellents, diethyltoluamide, ethyl hexanediol 6887.
- Diamessa**, karyotypes, phylogeny 2407.
- Diamesus oculatus**, geographical distribution, Australia, New South Wales 9502.
- Diamorpha smalli**, host plants, pollination, association, *Formica schauflussi* 1251.
- population genetics, pollen dispersal, *Formica* 553.
- Diapause**, activation, neurosecretion, brain cells, *Calliphora vicina* 6639.
- adaptations, parasitoids, geographical variations, *Leptophila boudardi*.
- Drosophila melanogaster* 6637.
- adults, sex differences, seasonal variations, *Danus plexippus* 350.
- carbohydrate metabolism, glycogen, glycerol, *Chilo suppressalis* 3482.
- cold tolerance, pupae survival, *Heliothis virescens*, *Heliothis zea* 3627.
- cytochrome degradation, synthesis, fat body mitochondria, *Heliothis zea* 5818.
- development, ecdysteroids, *Heliothis virescens* 7437.
- development, environmental effects, seasonal variations, *Cirphis unipuncta*.
- Laphygma erigae*, *Phusia gamma* 7470.
- effects on biochemical composition, *Gryllus campestris* 1099.
- effects on insecticides toxicity, *Diatraea grandiosella* 4234.
- effects on, photoperiods, geographical variations, malathion, *Tetranychus urticae* 1095.
- eggs, biochemical analysis, carbohydrates, metabolism, *Atachya menetriesi* 1098.
- eggs, cold tolerance, seasonal variations, *Rhopalosiphum insertum* 6638.
- eggs, *Diabrotica virgifera virgifera*, *Diabrotica longicornis*, *Diabrotica cristata*, *Diabrotica longicornis longicornis*, *Diabrotica virgifera zea* 8221.
- eggs, hormones, *Bombyx* 2678.
- eggs, hormones, metabolism, *Bombyx* mori 3474.
- eggs, infestation, hatching, damage, crop production, *Diabrotica virgifera* 691.
- eggs, protein composition, lines, *Bombyx* mori 9420.
- eggs, 20-hydroxyecdysone effects on development, *Bombyx mori* 2675.
- embryogenesis, temperature effects on, *Leptophyes punctatissima* 8240.
- emergence, population dynamics, *Megastigmus speculalis*, *Megastigmus spermotrophus* 5995.
- emergence, pupae, genetics, hybrids, *Heliothis virescens*, *Heliothis subflexa* 347.
- emergence, temperature effects, cold, *Pikonomia alaskensis* 3495.
- endocrine function, corpora allata, females, *Tetrix undulata* 3481.
- environmental effects, temperature, photoperiods, *Pectinophora gossypiella* 1096.
- enzymatic activity, brain adenylate cyclase, *Hyalophora cecropia*, *Antheraea pernyi* 124.
- fat body development, photoperiod sensitivity, *Hemosepilachna vigintioctopunctata* 7456.
- fertility, competition, males, *Anthonomus grandis* grandis 2677.
- genetic analysis, *Pectinophora gossypiella* 1100.
- geographical variations, latitude, larvae, *Aedes triseriatus*, USA, East 8222.
- growth, age effects, *Lysolema granarium* 1835.
- growth regulators, hydroprene, effects on development, *Hypera postica* 1873.
- hormones regulation, larvae, *Laspeyresia pomonella* 1119.
- hosts, effects on parasites, *Lydella thompsoni*, *Archanaa geminipuncta* 1857.
- immigration, life cycle, *Agrotis ipsilon*, USA, Iowa 5900.
- induction, longevity, environmental factors, *Barbara cillaxiana* 6640.
- induction, photoperiods, predators, diets, carotenoids, *Acari* 4257.
- juvenile hormones, effects on spermatogenesis, *Eurygaster integriceps* 6646.
- juvenile hormones, enzymatic activity, *Ostrinia nubilalis* 5075.
- juvenile hormones hydrolysis, larvae, *Diatraea grandiosella* 4256.
- juvenile hormones, metabolism, *Leptinotarsa decemlineata* 3479.
- larvae, carbohydrate composition, juvenile hormones effects on, *Chilo suppressalis* 199.
- larvae, environmental conditions, life cycle, *Colias alexandra* 6707.
- larvae, juvenile hormones effects on, *Chilo suppressalis* 3475.
- larvae, juvenile hormones, *Leptinotarsa decemlineata* 4164.
- Diapause**, (continued)
- larvae, photoperiods effects on, *Manduca sexta* 351.
- life cycle, feeding effects on, *Epheura danica*, *Siphonurus aestivalis*, Sweden 3055.
- life cycle, *Ixodes persulcatus* 9096.
- life cycle, synchronization, seasons, pest control, *Diatraea grandiosella*.
- Leptinotarsa decemlineata* 8446.
- life history, *Nepticula castanopseis* 3561.
- lipid metabolism, temperature effects, *Diatraea grandiosella* 1101.
- metabolism, insecticides, chlordimeform, excretion, *Diatraea grandiosella* 3333.
- migrations, synchronization, seasons, *Insecta* 8359.
- moulting hormones, *Bombyx mori* 3463.
- morphogenesis, temperature effects on, *Attagene megaloma* 5817.
- mortality, aggregation behavior, larvae, *Eurydyra phaeon* 7612.
- neuroendocrine system, environmental conditions, *Insecta* 3478.
- oocytes, nucleolus, rRNA biosynthesis, *Cordia* *alba* 2680.
- overwintering eggs, *Euxoa sibirica*, Japan, Tohoku 7438.
- overwintering, feeding, blood meals, *Culex tarsalis* 3570.
- overwintering, *Papilionidea*, *Hesperioidea*, North America 6880.
- overwintering, *Psila rosae*, British Isles 2674.
- photoperiod effects on, circadian rhythms, *Sarcophaga argyrostoma* 5815.
- photoperiod, *Lyonecia clerkella* 2773.
- photoperiod, phenology, population studies, *Diatraea grandiosella* 6831.
- photoperiod, temperature, *Aelia acuminata* 7461.
- photoperiodicity effects on, *Anabolia nervosa* 1103.
- photoperiods changes, emergence, hatching, *Acalolepta luxuriosa* 1094.
- photoperiods effects on, *Aedes triseriatus* 148.
- photoperiods, effects on biogeography, phylogeny, *Leptoptera* 2136.
- photoperiods effects on, circadian rhythms, *Tetranychus urticae* 3483.
- physiology, hormones, conferences, *Insecta* 3999.
- population studies, *Pieris napi*, British Isles 5074.
- pupae, amino acid composition, hemolymph, *Heliothis armigera* 2676.
- pupae, hormones effects on, *Heliothis punctiger* 2679.
- pupae, metabolism, juvenile hormones, *Sarcophagidae* 3477.
- pupae, prothorax, adaptiveness, *Leptidea sinapis* 5890.
- reproduction, population growth, pests, *Curculio elephas*, Hungary 7703.
- respiration, temperature effects, *Argiope aurantia* 1097.
- role, neuroendocrine system, metabolism, larvae, *Diatraea grandiosella* 3476.
- seasonal variations, reproduction physiology, *Epilachna varvetsi* 349.
- sexual reproduction, phenology, morphology, seasonal variations, *Lissonotus bonariensis*, New Zealand, Canterbury 1104.
- spermatogenesis, adults, *Gastrophysa atrocyanea* 1856.
- spermatogenesis, ecdysone effects on, *Laspeyresia pomonella* 5831.
- summer, photoperiod, hibernation, *Spilargia imparis* 7439.
- summer, photoperiods effects on, *Antheraea yanamasi* 3472.
- survival, eggs, oviposition, *Culicidae* 1373.
- temperature effects, development, *Psila rosae* 2697.
- termination, eggs, soil temperature effects on, *Delia coarctata* 3473.
- winter survival, hybrids, *Heliothis subflexa*, *Heliothis virescens* 1102.
- Diapause induction**, photoperiod, temperature, genetic control, *Diatraea grandiosella* 5076.
- Diapause termination**, hormones, metabolism effects on, *Hyalophora cecropia* 3480.
- photoperiod, temperature, genetic control, *Diatraea grandiosella* 5076.
- pupae, juvenile hormones, metabolism, *Sarcophagidae* 3477.
- temperature effects on, *Panonychus ulmi* 8214.
- temperature, photoperiod effects on, *Ortus insidiosus* 5816.
- Diaphania hyalina**, oviposition, substrate preferences, *Cucumis sativus* 5112.
- pest control, effects on crop yield, *Cucurbita pepo* 4567.
- Diaphania nitidalis**, diets effects on fecundity, survival, development 1890.
- oviposition, substrate preferences, *Cucumis sativus* 5112.
- population density, immature stages, mortality, *Cucumis sativus*, parasitism 597.
- Diapheromera femorata**, cuticles, chemical composition, organic compounds, lipids 109.
- Diaphorina citri**, biological control, predators food preferences, *Maripisa tigrina* 1208.
- Diaprepes abbreviatus**, attractancy, chemical stimuli, electroantennograms 5669.
- larvae, predators, species composition 4433.
- rearing, diets, fecundity, longevity 5147.
- Diaperobates crinitus**, new species, taxonomy, morphology, USSR 6341.
- Diaptomus leptopus**, ecological distribution, predation effects on, *Chaoborus americanus*, USA, Michigan 583.
- Diatraea**, population density, cycles, host-parasite interactions, *Trichopria cubensis*, *Parathesia clariipalis*, Trinidad 5986.
- Diatraea grandiosella**, chlordimeform, insecticides, metabolism, larvae, diapause, excretion 3333.
- diapause induction, diapause termination, photoperiod, temperature, genetic control 5076.
- diapause, juvenile hormones hydrolysis, larvae 4256.
- diapause, larvae, role, neuroendocrine system, metabolism 3476.
- diapause, lipid metabolism, temperature effects 1101.
- diets, development, immature stages, fecundity 1748.
- diets, sterols, effects on development, reproduction 3490.
- insecticides, penetration, metabolism, topical application, thioisobornamides -4232.
- insecticides, thioisobornamidine, toxicity, penetration 9030.
- larvae, binding, juvenile hormones, hemolymph proteins 207.
- larvae survival, crop fields, infestation 3737.
- mass rearing, oviposition cases 3240.
- pest control, diapause, life cycle, synchronization, seasons 8446.
- pests, infestation effects on crop fields 3822.
- pests, rearing systems, automation, methodology 4093.
- population studies, phenology, adaptations 6831.
- rearing, extraction methodology, media (culture), pupae 4087.
- rearing, harvesting methodology automation, pupae 8024.
- seasonal variations, occurrence, USA, Texas 9102.
- toxicity, insecticides, diapause effects on 4234.
- Diatraea saccharalis**, damage, yield, *Zea mays* 3751.
- development, body weight, diets, larvae, pupae 1750.

- Diatraea saccharalis**, (continued)
host-parasite interactions, chemical stimuli, larviposition, *Lixophaga diatraea* 5941
pest attack, damage, *Sorghum* 6080
pest control, biological control, chemical control, USA, Florida 3777
pest control, biological control, parasites, agricultural practices, Barbados 2951
pest control, parasites, *Lixophaga diatraea*, USA, Louisiana 2957
pests, control programs, pesticide resistance, biological control, chemical control, agricultural practices 1430
- Diatraea saccharalis**,
association, chemical control effects on, Formicidae 609
- Diazinon**,
disease control, sheep scab, *Psoroptes communis* 646
effects on, pest outbreaks, *Nilaparvata lugens* 307
insecticides, acaricides, efficacy, *Tetranychus telarius* 7794
insecticides, chemical control, efficacy, *Orseolia oryzae*, *Scirpophaga incertulas* 7771
pesticide resistance, selection, genotypes, *Lucilia cuprina* 7873
pesticide resistance, selection, *Nephrotetia cincticeps* 305
- Dibrachys boarmiæ**,
parasitoids, life cycle, *Galleria mellonella* 9131
- Dicera berbati**,
zoogeography, historical account, Europe 3983
- Diceros**,
taxonomy, nomenclature 3985
- Dichelocera adusta**,
new species, taxonomy, morphology, Brazil 3202
- Dichelocera diaphorata**,
synonymy, *Dichelocera leucobialis* 3202
- Dichelocera flavicosta**,
new species, taxonomy, morphology, Venezuela 3202
- Dichelocera leucobialis**,
synonymy, *Dichelocera diaphorata* 3202
- 5,6-Dichloro-1,8-D-ribofuranosylbenzimidazole**,
inhibition, hnRNA genes, transcription initiation, *Chironomus tentans* 8652
- Dichlorvos**,
chemical control, methodology, pests, *Megaselia halterata* 1461
insecticides, storage, efficacy, *Callosobruchus maculatus*, *Callosobruchus chinensis* 7686
- Dichrocercia punctiferata**,
feeding types, reproductive isolation, mating behavior, Japan 1912
pests, bionomics, environmental conditions, egg laying, oviposition 6924
sex pheromone, chemical composition, (E)-10-hexadecenal, attractancy, males 7341
- Dichroptera hyalina**,
natural enemies, parasites, predators 9137
parasites, host specificity, *Dryinidae* 401
- Dichroptus**,
phenotypes, classification, morphology, 33 species 8892
- Dichrorampha mahlikara**,
new species, morphology, feeding behavior, USA, Florida 1660
- Dichrorampha sapodilla**,
new species, morphology, feeding behavior, USA, Florida 1660
- Dielispa armigera**,
pest outbreaks, crops, damage, *Oryza sativa*, India, Tripura 7796
- Dieladocerus nearcticus**,
parasites, pesticides, toxicity, *Coleophora laricella* 5782
- Dicoelof**,
pesticide resistance, metabolism, *Tetranychus urticae* 1840
- Dicranocentrus**,
new species, Ivory Coast 3190
new species, taxonomy, morphology, Nepal 6387
taxonomy, morphology 3191
- Dicranocentrus assimilis**,
new species, Ivory Coast 3190
- Dicranocentrus delamareti**,
new species, Ivory Coast 3190
- Dicranocentrus inermodes**,
new species, Ivory Coast 3190
- Dicranocentrus lawrencei**,
new species, Ivory Coast 3190
- Dicranocentrus longicornis**,
new species, Ivory Coast 3190
- Dicranocentrus meruensis**,
new species, Ivory Coast 3190
- Dicranocentrus orientalis**,
new species, Ivory Coast 3190
- Dicranocentrus solomonensis**,
new species, Ivory Coast 3190
- Dicranocentrus spinosus**,
new species, Ivory Coast 3190
- Dicranota candelisequa**,
new species, taxonomy, morphology, Europe 6403
- Dicranota flammata**,
new species, taxonomy, morphology, Europe 6403
- Dicranotropis hamata**,
feeding, food utilization, nitrogen 6747
food quality, food consumption, oviposition, nutrient utilization 3547
- Dicroaspis**,
taxonomy, revision, identification keys, Ethiopian Region 1652
- Dicrodiplosia manibodi**,
new species, geographical distribution, feeding behavior, Africa 1624
- Dicrotelidipes nervosus**,
infestation, pathogens, *Entomophthora culicis*, USA, New York 5036
- Dicrotophos**,
insecticides, chemical control, trunk injection, trees, *Carya ilinoensis*,
Monelliopsis nigropunctata, *Monella caryella*, *Tinocalis caryaeformis* 8566
- Dietyna**,
predation, prey species composition, webs, Egypt, Arab Rep 480
social organization, territorial behavior, silk repellents 3839
- Dietyploca japonica**,
pheromones, effects on males activity patterns, interspecific relationships, *Philosamia cynthia* 2761
- Dictyoptera**,
records, introduced species, 4705
- Dicyrtoma christinae**,
new species, taxonomy, morphology, Poland 8780
- Dieback**,
population decline, role, infection, *Dreyfusia*, *Abies alba*, Germany, Fed. Rep. 8342
- Diel activity**,
drift, population density, nymphs, *Atalaphlebioides*, Australia 754
melanism, absorption, solar radiation, *Colias* 6536
periodicity, emergence, environmental conditions, *Chironomidae*, USA, Florida 152
seasonal variations, flight activity, *Culicoides varipennis*, *Culicoides crepuscularis*, *Culicoides heroglyphicus*, *Culicoides palmeriae*, USA, Colorado 442
vertical migrations, spatial distribution, host plants, *Acyrtophorinae* gossypii 6717
- Diel periodicity**,
emergence, factors affecting, light, water temperature, *Chironomidae*, Canada, Ontario, Windrow Farm Stream 8604
metabolism, oxygen consumption, colonies, *Apis mellifera* 5417
temperature effects, trail following behavior, *Indomymex purpureus*, Australia 3546
- Diel variations**,
activity patterns, body temperature, weather, *Tenebrionidae*, USA, Washington 8274
activity patterns, burrowing behavior, *Gelyocosa domfex* 1186
activity patterns, *Eanas vitella*, *Diactis obliqua*, *Spodoptera litura*,
Heliothis armigera, *Chilo partellus*, India 9100
activity patterns, predator-prey interactions, *Insecta*, *Parulidae* 4421
age composition, population density, mathematical models, *Callosobruchus chaneisis*, *Callosobruchus maculatus* 8371
emergence, streams, *Chironomidae*, Canada, Ontario 6224
feeding, succession, species composition, *Formicidae*, Turkey 6744
migrations, *Nemobius sylvestris* 153
oviposition, hatching, eggs, adult eclosion, *Atherigona soccata* 4983
photoperiod, mating behavior, *Chilo suppressalis* 2743
photoperiods, circadian rhythms, sexual behavior, oviposition, *Culex quinquefasciatus* 1153
sexual behavior, *Amyeloides transiella* 5838
ventilatory behavior, *Erythemis simplicicollis* 5876
- Dielisus**,
acute toxicity, *Blaberus discoidalis* 301
insecticides, ganglia, electrophysiological recording, toxicity, *Blaberus discoides* 5778
insecticides, metabolism, microorganisms, cuticle, *Calliphora erythrocephala* 5799
pesticide resistance, beritability, *Piodia interpunctella* 1560
pesticide resistance, selection, genotypes, *Lucilia cuprina* 7873
- Dieldrin-pentachloroketone**,
delkin metabolites, acute toxicity, *Blaberus discoidalis* 301
- Dieldrin**,
insecticides, effects on webs spinning, *Tetranychus cinnabarinus* 1048
- Dilepoxy butane**,
mutagenesis, sensitivity, *Drosophila melanogaster* 7040
- Dithiylfluamide**,
repellents, pest control, *Dermanis montanus* 6887
stored products pests repellents, repellency, *Insecta* 711
- Diets**,
adsorption, potato virus Y, tobacco mosaic virus, *Myzus persicae* 3416
analysis, methodology, *Heteroptera* 4079
antibiotics, effects on mycetozoa symbionts, *Rhizopertha dominica* 7535
artificial diets, amino acids composition, rearing, *Anastrepha obliqua* 4922
association, defense mechanisms, *Lycanid*, *Formicidae* 1180
association *Insecta*, *Arachnida*, *Zygodiphilus simplex*, Namibia, Namib Desert 9160
bacteria, fungi, contaminants, rearing, *Heliothis* 735
biological control, infection, larvae, *Brugia pahangi*, *Aedes aegypti* 1358
Bos taurus, effects on, catchability, *Glossina morsitans*, *Glossina palpalis*,
Zimbabwe 1173
- Brassica campestris**, *Brassica napus*, growth, development, survival, larvae,
Entomoscirtus americana 2076
carbofuran, mortality, *Apis mellifera* 6201
carbohydrates, phospholipid composition, *Euxestus roborator* 3313
carbon, nitrogen, survival, longevity, reproduction, *Dacus oleae* 1109
carnivores, enzyme activity, digestive tract, *Pterostichus nigrita* 6544
carragenaes, rearing, nuclear polyhedrosis virus yield, *Lymantia dispar* 8008
carvone, effects on development, growth, *Spodoptera littoralis* 8231
canous variation, hemolymph, *Bombyx mori* 5673
cholesterol chemical composition, effects on growth, development, *Bombyx mori* 2690
culture, effects on larvae survival, development, *Ostrinia nubilalis* 3485
cuticle, electrical properties, thermoregulation, *Vespa orientalis* 3272
development, body weight, larvae, pupae, *Heliothis virescens*, *Diatraea saccharalis* 1780
development, immature stages, fecundity, *Diatraea grandiosella* 1748
development, life history, *Euproctus lunata* 4323
disease induction, carotenoids, photoperiods, predators, *Acar* 4257
diflubenzuron, effects on reproduction, colonies, *Apis mellifera* 6622
digestive tract, enzymatic activity, *Trichoptera* 1757
digestive tract, enzymes, aminopeptidase, carboxypeptidase, 1760
digestive tract minerals, fluids, nutrient uptake, *Oncopeltus fasciatus* 2552
digestive tract, pH, *Neotermes bowei*, *Oedotermes distans*, hydrogen ions 1747
ecdysteroids, effects on development, *Musca domestica* 7463
ecological distribution, *Colias alexandria*, host plants 7517
effects on, body measurements, head, larvae, *Bactra verutana* 380
effects on caste differentiation, queens, *Apis mellifera* 376
effects on chromosomes banding, enzymatic activity, *Aphididae* 3091
effects on development, *Hercostoea femoralis* 6645
effects on development, *Loxostege commutalis* 1859
effects on development, mortality, *Acrotylus insubricus* 2693
effects on differentiation, workers, males, colonial characteristics,
Scaptomyza postica 7001
effects on digestive tract functional morphology, *Euprocneis alacris* 461
effects on enzymatic activity, *Hyalophora cecropia* 201
effects on fatty acid composition, *Oncopeltus fasciatus* 6586
effects on fecundity, flight activity, *Bactra verutana* 6821
effects on fecundity, survival, development, *Diaphania nitidalis* 1890
effects on flight activity, *Simulium ornatum* 5878
effects on infection, *Nomuraea rileyi*, *Spodoptera frugiperda* 1806
effects on longevity, fecundity, eggs maturation, *Pectinophora gossypiella* 7459

Diets, (continued)

effects on longevity, fecundity, fertility, mating, *Cydia pomonella* 2765
 effects on longevity, fecundity, reproduction, *Cyphoderus javanus* 5090
 effects on metabolism, growth, reproduction, *Isoetema viridis* 4268
 effects on oogenesis, *Coccinella septempunctata* 1114
 effects on oogenesis, proteins, *Culex pipiens pallens* 5819
 effects on oviposition, longevity, sexual behavior, *Menochilus sexmaculata* 1117
 effects on parasites infectivity, *Nematoda*, *Culicidae* 266
 effects on pathogens survival, *Aedes aegypti*, *Smittium culicetae* 2645
 effects on phenotypes, *Leptothorax* 3373
 effects on ultrastructure, hepatopancreas, *Armadillidium vulgare*, *Porcellio scaber* 6589
 eggs predation, development, *Epicauta atrata* 6839
 environmental effects, development, larvae, *Tribolium confusum* 2687
 enzymatic activity, digestive tract, chitinase, symbionts, *Neotermes bosei*, *Odontotermes distans*, *Speculitermes cyclops* 926
 ethionine, methionine, metabolism, *Agrina housei* 3319
 feeding behavior, *Coccinellidae* 5167
 feeding behavior, food conversion, growth rate, *Hyalophora cecropia* 5970
 feeding behavior, gut microflora, yeasts, *Drosophila* 5917
 feeding behavior, *Lagynochthosus hygricus* 5251
 feeding behavior, *Tadanda aegyptiaca thomasi*, *Insecta*, *India* 5221
 fertility, *Culicoides simulans*, USSR, *Abakan* 9197
 feeding, fecundity, *Athergona soccata* 4434
 food, artificial substrates, rearing, methodology, *Sabulodes aegrotata* 4084
 food organisms, effects on development, oviposition, *Cardiastethus nazareus* 6651
 food organisms, effects on longevity, fecundity, *Amblyseus gossipi* 7603
 food organisms, *Peucea viridans* 9122
 food plants, effects on growth, development, *Sitotroga cerealella* 379
 food plants, effects on physiology, nutrition, *Spodoptera endaus* 5677
 food plants, *Mamestra oleracea*, Europe 9156
 food preferences, larvae, *Tipulidae*, USSR 6738
 food sources, *Monopus spilotella*, *Archimedeapogon laterellus*, *Nemagogen picarellus*, Finland 7532
 foraging behavior, coexistence, *Holcophala abdominalis*, *Holcophala calva*, coexistence 6029
 foraging behavior, functional morphology, tongue length, *Syrphidae* 5922
 grains, effects on development, population growth, *Sitophilus zeamais*, *Tribolium castaneum* 9048
 growth, host-parasite interactions, *Aedes aegypti*, *Brugia pahangi* 289
 growth, survival, fecundity, *Tribolium confusum* 8078
 hematology, surveys, 15 families, *Diptera*, Sweden 4351
 honey production, apiculture, *Apis mellifera* 5304
 host plants, life history, *Myiodesmus undecimpunctatus maculosus* 5151
 host plants, pest resistance, damage, selection, *Ostrinia nubilalis*, *Zea mays* 3780
 host plants, *Scymnoides lividigaster*, *Leptotheca galbula*, habitat utilization, *Australia* 6049
 host-parasite interactions, susceptibility, *Aedes aegypti*, *Brugia pahangi* 288
 hosts, parasites, toxaria, *Hyposoter exiguae*, *Heliothis zea* 3578
 insecticides, toxicity, ¹⁴C-phorates, *Myzus persicae*, *Brevicoryne brassicae* 2658
 isomers fatty acids, effects on growth, *Plodia interpunctella* 378
 life cycle, pests, *Helopeltis antonii*, Sri Lanka 4532
 linoleic acid, effects on spermatogenesis, *Acheta domesticus* 1121
 linolenic acid, nutrition, *Mamestra configurata* 8079
Meliponera schwartzii, Panama, *Gambou* 6681
 mass rearing, *Sogatella longirostris* 2485
 methoprene, *Autographa californica* nuclear polyhedrosis virus virulence, pest control, *Heliothis virescens* 6967
 B-methylcholine, effects on choline, nervous system, *Musca domestica* 4076
 nutrient sources, proteins, sucrose, effects on locomotor activity, *Anthonomus grandis* 8276
 nutrition, development, feeding, *Corycia cephalonica* 7452
 nutrients, growth index, larvae, *Corycia cephalonica* 7467
 nutrition, nitrogen, *Lymantaria dispar* 4150
 nymphs, *Coenagrion resolutum*, *Lestes disjunctus disjunctus*, Canada, Alberta 3056
 nymphs, phenology, *Stenocranus interpunctatus*, *Stenonema pulchellum* 3052
 phenols, cuticle incorporation, *Anasidrium melanohorum* 7284
 pollen, brood rearing, apiculture, *Apis mellifera* 5310
 pollen, effects on population growth, fecundity, *Amblyseius hibisci* 7572
 population dynamics, demography, *Achipteria holomonensis* 6002
 predation, lakes, *Polycelis nigra*, *Insecta* 1487
 predators, *Bembix* 6033
 protein composition, interaction, mycotoxins, effects on growth, *Tenebrio molitor* 1113
 protein sources, apiculture, *Apis mellifera* 3754
 proteins, reproduction, *Dysdercus koenigii* 7480
 rearing, *Crocidolomia binotalis*, *Helula undalis* 1746
 rearing, fecundity, longevity, *Diaprepes abbreviatus* 5147
 rearing, *Geocoris punctipes* 1691
 rearing, methodology, *Colias erytheme*, *Colias philodice* 7250
 rearing methodology, *Gryllidae* 5632
 rearing, methodology, larvae, *Heliothis armigera* 6475
 rearing methodology, *Lygus lineolaris* 8011
 rearing, nuclear polyhedrosis virus, pathogens, *Lymantaria dispar* 3702
 resource partitioning, *Silphidae*, Canada, Ontario 9209
 rutin, effects on growth, fecundity, *Acheta domesticus* 3484
 sex pheromone, courtship role, biochemical analysis, *Utheesia ornatrix* 4304
 sterilization, pest control, *Anthonomus grandis* 8486
 sterols, effects on development, reproduction, *Dianaea glandiella* 3490
 sugar, effects on supernumerary molting, *Matricaria sexta* 1107
 survival, hybridization, *Ostrinia nubilalis*, *Ostrinia umbrobratalis*, *Ostrinia penitalis* 7053
 survival, larvae, *Nilaparvata lugens*, Japan 1204
 synthetic, apiculture, nutrient requirements, sterols, *Apis mellifera* 1407
 traps, efficacy, *Anthonomus grandis* 6194
 variations, environmental factors, *Pycnoscypha guttifer*, Canada, Quebec, *Matamek* R. 8605
 yeasts, effects on growth, development, *Dacus cucurbitae* 7447.

Differentiation,

castes, colonial characteristics, *Paratrigona subura* 6996
 castes, methoprene, precocene, antagonism, *Prothorinotermes simplex* 6647
 cell lines, juvenile hormones analogs effects on, *Drosophila* 7328
 cells, control, books, *Insecta* 8711.

Differentiation, (continued)

cells, electropotential, ovary, *Cecropia*, *Rhodnius* 3512
 cells, epidermis, juvenile hormones effects on, *Lepidoptera* 3519
 cells, gene regulation, loci, *Drosophila* 5445
 embryo cells, antibodies effects on, *Drosophila* 368
 embryology, cuticle, tissues, *Drosophila melanogaster* 1093
 fat body origin, *Protophorma tetranevosa* 342
 genitalia morphology, *Abrostola tripilasa*, *Abrostola asclepiadis*, *Abrostola trigemina*, Czechoslovakia 1723
 gonads, histology, *Drosophila* 1080
 histology, humerus imaginal discs, *Drosophila melanogaster* 331
 imaginal discs, *Drosophila melanogaster* 1081
 imaginal discs, regulation, *Drosophila* 335
 morphology, genitalia, *Celyphoides cespitans*, *Celyphoides flavipalpus*, Czechoslovakia 1724
 tissues, gene regulation, transcription, *Drosophila melanogaster* 1498
 wing discs, *Drosophila* 1084
 workers, males, diets effects on, *Scaptotrigona postica* 7001.

Diflubenzuron,
 bioaccumulation, localization, tissues, histochemistry, *Pieris brassicae* 1059
 chemoesterilization, effects on hemolymph, *Anthonomus grandis* 5711
 DNA biosynthesis inhibition, pupae, *Stomoxys calcitrans* 1043
 effects on development, larvae, *Spodoptera mauritia* 5084
 effects on DNA biosynthesis, *Stomoxys calcitrans* 1512
 effects on parasites development, *Bioesteres longicaudatus*, *Anastrepha suspensa* 357
 effects on reproduction, colonies, *Apis mellifera* 6622
 efficacy, pest control, *Anthonomus grandis* 8519
 insecticides, efficacy, chemical control, *Anthonomus grandis* 4584
 insecticides, factors affecting, toxicity, *Laspeyresia pomonella* 4225
 insecticides, metabolism, *Tetranychus urticae* 1390
 insecticides, pest control, inhibition, sexual reproduction, *Poeciloscirus pictus* 4619
 insecticides, pest control, *Muscidae* 5345
 insecticides, toxicity, *Hypera postica* 7420
 metabolism, effects on chemical composition, *Aedes aegypti* 302
 metabolism, sesoxane, *Musca domestica* 5773
 pest control, efficacy, *Laspeyresia pomonella* 8562
 pesticide residues, soil, toxicity, *Musca domestica* 2656
 pollution effects, streams, community composition, toxicity testing, *Insecta* 9370
 pollution effects, streams, *Insecta* 7024
 radiation, effects on sterility, *Anthonomus grandis* 1123
 toxicity, chemical control, *Spodoptera mauritia* 3034
 toxicity, chitin biosynthesis, *Chironomus trachyporus* 6620
 toxicity, *Coleophora laricella* 5782
 toxicity, effects on reproduction, *Oryza japonica* 5767
 toxicity, nontarget organisms, colonies, *Apis mellifera* 3446
 toxicity, nymphs, *Melanoplus sanguinipes* 6628.

Diffluron,
 insecticides, toxicity, *Sitophilus granarius* 5769
 toxicity, pest control, *Sitophilus granarius* 9297.

Digamassellus,
 phoresy, interspecific relationships, *Dasyhelea oppressa* 6040.

Digestion,
 blood meals, response, midgut, epithelium, cells, *Culex tarsalis* 6547
 cellulose, digestive tract symbionts, *Cunninghamella echinulata*, *Odontotermes obscurus* 4364
 cellulose, enzymes, *Insecta* 4156
 cellulose, gut microflora, bacteria, *Orthoporus ornatus*, *Comanichus* 8308
 fluids, *Autographa californica* nuclear polyhedrosis virus, *Trichoplusia* n1 5742
 fluids, solubility, *Autographa californica* nuclear polyhedrosis virus, *Trichoplusia* n1 4201
 midgut, enzyme activity, larvae, *Rhynchosciara americana* 6546
 proteins, arylamidases, midgut, *Rhynchosciara americana* 6545
 wood borers, *Crioceraphus syriacus*, *Rhagium inquisitor*, *Ergates faber* 4344.

Digestive enzymes,
 carboxypeptidase, characterization, *Attagenus megatoma* 1765
 developmental stages, *Heteropneustes fossilis* 2569
 digestive tract regulation, *Periplaneta americana* 2548
 effects on pathogenicity, *Bacillus thuringiensis*, *Leucania separata* 999
 enzymatic activity, acclimation, temperature effects, *Periplaneta americana* 3372
 enzymatic activity, digestive tract, *Rhynchosciara americana* 2543
 enzymatic activity, larvae, *Attagenus megatoma* 1762
 enzymatic activity, proteolytic enzymes, midgut, *Haematobia irritans* 2551
 salivary gland, gut, salivary gland, *Haematobia irritans* 185.

Digestive tract,
 active transport, potassium, *Hyalophora cecropia* 2544
 activity, measuring techniques, *Semidialia innotata* 2545
 anatomy, comparison, castes, *Rugitermes niger*, Brazil 8926
 cells, endocrine system, ultrastructure, *Lepidoptera* 924
 cells, morphometry, factors affecting ribosomes distribution, *Aedes aegypti* 923
 cellulase activity, Protozoa, *Matostomes darwiniensis* 5931
 enzymatic activity, amylase, sex differences, *Gryllotalpa africana* 2547
 enzymatic activity, carbohydrate metabolism, *Neotermes bosei* 949
 enzymatic activity, chitinase, symbionts, *Neotermes bosei*, *Odontotermes distans*, *Speculitermes cyclops* 926
 enzymatic activity, diets, *Trichoptera* 1757
 enzymatic activity, NADPH-cytochrome reductase, *Spodoptera eridania* 1758
 enzyme activity, diets, carnivores, *Pterostichus nigrita* 1745
 enzymes, B-glucosidase, temperature effects, rhythms, *Halicta caerulea* 1745
 enzymes, carbohydrates, *Sarcophaga albiceps* 7311
 enzymes, diets, aminopeptidase, carboxypeptidase, *Rhodnius prolixus* 1760
 enzymes, larvae, *Athergona soccata* 4153
 epithelium, immunohistochemistry, histology, *Periplaneta americana* 925
 fate, blood meals, sugar, effects on starvation, *Toxorhynchites rutilus* 922
 fluids, enzymatic activity, larvae, *Trichoplusia* n1 1749
 fluids, minerals, nutrient uptake, diets, *Schistocerca gregaria* 2552
 fluids, nutrient uptake, *Schistocerca gregaria* 2553
 functional morphology, diets effects on, *Eyprepocnemis alacris* 461
 functional morphology, histology, osmoregulation, *Diploptera* 161
 functional morphology, histology, *Reduviidae* 158
 histology, enzymatic activity, *Valanga irregularis* 2565
 histology, histochemistry, *Abacus ovatus* 160
 morphogenesis, embryogenesis, *Panorpa pyri* 3458

Digestive tract, (continued)

- morphology, feeding behavior, Nicolettiellidae 496.
morphology, physiology, *Periplaneta americana* 4992.
parasites abundance, diurnal variations, *Thelastoma bulboesi*, *Periplaneta americana* 2642.
parasites, *Holophrynchus ramidigitus*, *Agroememys pygmaea*, India 1000.
parasites, life cycles, *Stenoductus chondromorpha*, *Chondromorpha kelaarti* 4182.
pathogenesis, *Trypanosoma cruzi*, *Triatoma* 5022.
pathogens, survival, *Mutacella bovis*, *Musca autumnalis* 8136.
pH, hydrogen ions, *Neotermes bosei*, *Odonotermes distans* 1747.
pheromones biosynthesis, *Ips paraconfusus* 1786.
pollen transport, *Leptoprotus cyanescens*, *Euryglossidae* 8927.
protein biosynthesis, larvae, *Bombus morio* 959.
protein composition, blood meals, immunology, *Dermacentor andersoni* 4997.
regulation, digestive enzymes, *Periplaneta americana* 2548.
symbionts, cellulose digestion, *Cunninghamella echinulata*, *Odonotermes obsesus* 1364.
symbionts, occurrence, *Leidyana*, *Nepenthes serripua* 6751.
symbionts, procaryotes, culture, *Lolita grandis* 2808.
ultrastructure, histology, *Tetranychus urticae* 2546.
water uptake, ion exchange, *Acrididae* 239.
- Digitalis purpurea**,
pollinators, foraging behavior, mathematical models, *Bombus* 5920.
- Digitalis**,
crops, pest resistance, *Sipha flava* 4607.
pest resistance, *Sipha flava* 9348.
- Digitalis didactyla**,
host plants, pupae distribution, *Hypocysta adiantae*, *Xois arctus* 1244.
- Diglyphus intermedialis**,
parasites, emergence, temperature effects, *Liriomyza sativae* 1869.
- Diglyphus puzosensis**,
host-parasite interactions, temperature, effects on population dynamics, *Phytomyza ranunculi* 7577.
- Dihydroxycopterin triphosphate**,
cleavage, enzymes, isolation, characterization, *Drosophila melanogaster* 962.
- 2,4-Dihydroxy-5-methoxy-1,4-benzoxazin-3-one**,
effects on development, mortality, reproduction, *Ostrinia nubilalis* 9306.
- Dilariidae**,
taxonomy, morphology, Brazil, Amazon Basin 4055.
- Dilleritonus**,
fauna, taxonomy, morphology, geographical distribution, North America 4027.
- Diloricormus filiformis mandus**,
new subspecies, taxonomy, morphology, geographical distribution, North America 4027.
- Dilophus**,
taxonomy, morphology, keys, North Africa 4836.
- Dilophus antipedalis**,
taxonomic revision, morphology, Europe 7182.
- Dilophus beckeri**,
taxonomy 4836.
- Dilophus febrilis**,
gynandromorphs, morphology 5648.
taxonomic revision, morphology, Europe 7182.
- Dilophus humeralis**,
taxonomic revision, morphology, Europe 7182.
- Dilophus maghrebenis**,
new species, taxonomy, morphology, North Africa 4836.
- Dilophus neglectus**,
new species, taxonomy, morphology, Europe 7182.
- DIMBOA**,
agrochemicals, effects on growth, *Ostrinia nubilalis* 6100.
- Dimethoate**,
insecticides, systemics, toxicity, pesticide residues, *Aphis gossypii* 7413.
pesticide resistance, genetic variance, evolution, *Musca domestica* 9422.
pesticide resistance, *Musca domestica*, Germany, Fed. Rep. 311.
- Dimethyl sulfoxide**,
pesticide resistance, population genetics, selection, *Musca domestica* 3124.
- effects on polytene chromosomes, puffing, *Chironomus tentans* 3881.
- 7,12-Dimethylbenz(a)anthracene**,
mutation, sex chromosomes, *Drosophila melanogaster* 2332.
- Dimethylnitrosamine**,
effects on chromosomes, lesions, males, *Drosophila melanogaster* 6264.
- Dimethylnitrosamine demethylase**,
activity, *Drosophila melanogaster* 8944.
- Dimethylphthalate**,
stored products pests repellents, repellency, *Insecta* 711.
- Dimilin**,
growth regulators, effects on development, sex ratio, *Culex pipiens* 1042.
pesticides, chemical control, toxicity, *Aedes aegypti*, *Culex pipiens* 1832.
toxicity tests, larvae, *Apis* 7406.
- Dimmockia incongrua**,
hyperparasitism, parasitoids, *Megalopteryx opercularis* 8311.
- Dimorphism**,
color, pubescence, photoperiod, rearing, *Thyanta calceata* 5092.
females, *Hydrotus ovatus*, Finland 7895.
functional morphology, pathogens, *Xenobdus*, *Galleria* 4189.
Lepidoptera, *Trichoptera* 8879.
life cycle, photoperiod effects on, *Anaea andria* 7444.
- Dimorphopterus cornutus**,
new subspecies, taxonomy, morphology, Papua New Guinea 3211.
- 2,4-Dinitrophenol**,
effects on flight muscle mitochondria, *Musca domestica* 322.
- Diospis thoracica**,
pests, geographical distribution, annual cycles, population dynamics.
host-parasite interactions, Senegal 7753.
- Dioryctria amatela**,
males, bioassays, pheromones response, sexual behavior 400.
mating behavior, oviposition, activity patterns, host plants effects on 1914.
- Dioryctria disclusa**,
catching methods, sex pheromone, bait, traps, USA, South Carolina 425.
- Dioryctria pygmaea**,
life cycle, feeding behavior, *Taxodium* pests, USA, Florida 3560.
- Dioryctria renickiellolides**,
pest outbreaks, abundance, life cycle, USA, Idaho 9305.
pest outbreaks, species composition, life cycle, USA, Idaho 5889.
- Dioryctria schuetzeella**,
new records, geographical distribution, British Isles 6306.
- Dioryctria taeda**,
immature stages, biology 2503.
immature stages, morphology, biology 2503.
- Diparopsis castanea**,
chemical control, insecticides, cypermethrin, *Gossypium* 5389.
females, chemical control, methodology, sex pheromone, inhibitors 1465.
sex pheromone, (Z)-9,11-dodecadien-1-yl acetate synthesis 1777.
- Diparopsis watsoni**,
chemical control, pest control, crop fields, Togo 2987.
- Dipetaloaster maxima**,
bites, hypersensitivity, man 1375.
- Diphobia**,
taxonomy, biometrics, geographical variations, Australia 8044.
- Diplatys gladiator**,
chromosomes, India 7035.
- Diplatys rufescens**,
chromosomes, India 7035.
- Diplazon**,
taxonomy, synonymy 4031.
- Diplazon beinrichi**,
new species, taxonomy, morphology 4031.
- Diplazon pectoratorius**,
courtship, swarming, sex pheromone 5110.
- Diplazontinae**,
keys, morphology, taxonomy 5591.
- Diplectrona modesta**,
secondary production, food consumption, USA, Georgia 2291.
- Diplococcus abdominalis**,
feeding, food utilization, nitrogen 6747.
- Diplococcus abdominalis**,
species composition, species diversity, grasslands, Austria 6869.
- Dipodia maydia**,
snail rot, *Ostrinia nubilalis* infestation effects on, *Zea mays* 8496.
- Diploids**,
drones, chromosomes, *Apis cerana japonica* 1546.
- Diploidy**,
chromosome number, chromosome B, *Southonaxia maenas*, India 7036.
evolutionary genetics, sex determination, haploidy, *Hymenoptera* 1550.
genetic variance, haploidy, *Drosophila* 3118.
longevity, age composition, unbreeding, *Melipona quadrifasciata* 9032.
- Diplolepis rosea**,
morphology, taxonomy, synonymy 1645.
- Diploperla**,
nymphs, morphology, taxonomy, keys 1674.
- Diploperla duplicata**,
taxonomy, morphology, keys 1674.
- Diploperla marginalis**,
taxonomy, morphology, keys 1674.
- Diplopoda**,
collections, new records, new species, Iran 851.
digestive tract, functional morphology, histology, osmoregulation 161.
feeding behavior 9129.
soil fauna, enzyme activity, nutrient dynamics 9368.
soil fauna, population dynamics, seasonal variations, Czechoslovakia 7599.
species composition, habitat preference, activity patterns, development, German Dem. Rep., Thuringia 7588.
species composition, symbiosis, nests, Formicidae 8382.
toxins, medical importance, Switzerland 641.
- Diploptera punctata**,
corpora allata ablation effects on juvenile hormones biosynthesis 2580.
corpora allata, oogenesis, cell cycle, juvenile hormones 2710.
corpora allata regulation, hormones, oogenesis 3494.
farnesic acid stimulation, juvenile hormones biosynthesis, corpora allata 208.
juvenile hormones biosynthesis, precocene effects on 1771.
juvenile hormones effects on milk biosynthesis, secretion 2589.
oogenesis, proteins, vitellogenin 1884.
reproduction, juvenile hormones, enzyme activity 6657.
- Diploschizia**,
new genera, morphology, North America 1659.
- Diploschizia habecui**,
new species, morphology, North America 1659.
- Diploschizia kimbali**,
new species, morphology, North America 1659.
- Diploschizia mlaimella**,
new species, morphology, North America 1659.
- Diploschizia regia**,
new species, morphology, North America 1659.
- Diptrurinae**,
taxonomy, morphology, Australia 2389.
- Diprion pini**,
chemical control, pesticide residues, soil, effects on nontarget organisms 2656.
cocoon, parasites, abundance, life cycle 7541.
- Diprion similis**,
surveys, geographical distribution, pheromone traps, sampling, USA, North Carolina 8555.
- Dipropyl disulfide**,
oviposition attractancy, EAG responses, chemoreception, *Hylemya antiqua* 3358.
- Diptera**,
abundance, cattle pests, seasonal variations, Germany, Fed. Rep., Bavaria 2184.
abundance, paddy fields 5261.
allochthonous input, streams energetics 8373.
association, abundance, beaches, *Ecklonia maxima*, *Laminaria pallida* 541.
association, host plants, pollinators, *Minuartia groenlandica*, USA, New Hampshire, Mount Washington 5974.
benthos, Venezuela, Valencia L. 621.
bioaccumulation, mercury, *Basidiomycetes*, larvae 5129.
bioaccumulation, mercury, larvae, food organisms, fungi 2620.
biological control, pathogens, spores, *Bacillus thuringiensis israelensis*, streams 6101.
biological control, pathogens susceptibility, *Bacillus thuringiensis israelensis* 7651.
cavernicolous species, species composition, Geneva Museum, Europe 5440.
community composition, species diversity, Crozet Is. 6828.
disease transmission, African trypanosomiasis, cattle 1338.

Diptera, (continued)

- disease transmission vectors, aging methods 4493
ectoparasites, birds, new records, USA, Alaska 520
feeding behavior, hematophagy, surveys, 15 families, Sweden 4351
flight activity orientation, ocelli effects on 149
food organisms, Cypripidae 620
geographical distribution, new records, Sweden 3945
hematophagy, chemical control, pest control 3656
host searching behavior, effects on hosts colonization, *Egus zebra* 2130
hosts, effects on parasites development, *Muscidifurax* sp., *Spalangia drosophila* 2116
infestation, wounds, case reports, man 7642
interspecific relationships, population density, community composition, algae, USA, California 3859
intestinal parasites, *Zenaidra macroura*, *Zenaidra asiatica*, USA, Florida 3582
laboratory animals cages, entomofauna, *Cavia porcellus* 638
larvae, association, Anura eggs, South America 7816
larvae, fruit bodies association, fungi 538
larvae, serum proteins 2564
morphology, identification keys, British Isles 3258
occurrence, geographical distribution, Czechoslovakia 3937
parasites, check lists, Mammalia, New Zealand 1231
parasitoids, competition, Hymenoptera, Lepidoptera hosts 1224
parasitoids, competition, Hymenoptera, Lepidoptera hosts 1225
pest control, biological control, parasitoids, *Vespidae* 9122
pest control, efficacy, repellents 8961
pest control, poultry farms, attractants, efficiency 4639
pesticide-killed organisms, nontarget organisms, USA, Southwest 2206
pests, pest control, abundance, *Persea* fruits 1454
pollination, host plants, flowering, *Lomatium* 6785
pollination, *Listera ovata*, Sweden 5204
pollination, reproduction, flowering, *Asarum caudatum* 6786
pollution effects, sedimentation, nutrient enrichment, species richness, species diversity, streams, USA, Appalachian Mts 7815
population changes, natural disturbance, predation, effects on seasonal variations, coastal environment 8602
predators, Aphididae prey, India 4417
proteins: structure, sclerotization, pupae 8943
rearing methodology, emergence 7248
records, introduced species, 4705
resting behavior, diurnal variations, physical activity, environmental effects, temperature, humidity 4316
soil fauna, indicator species, toxicity tests, ecosystem dynamics 5761
species composition, flight activity, USSR, Donetsk 9195
species diversity, ecological distribution, abundance, Canada, Ontario, Salem Creek 3856
supercooling, cold hardness, Antarctic 3364
surveys, environmental hygiene, roads, Czechoslovakia 1349
surveys, species composition, abundance, British Isles 6109
taxonomic revision, phylogeny 6398
toxicity, endrin analogs 1072
vectors, *Onchocerca tarsiicola*, *Cervus elaphus* 662.

Diptera,

- feeding, blood sucking, olfaction sensilla 2532.
Diptiominiopis artocarpae,
new species, taxonomy, morphology, India 7134.
Diptiominiopis cameracae,
new species, taxonomy, morphology, India 7134.
Diptiominiopis coccinea,
new species, taxonomy, morphology, India 7134.
Diptiominiopis integrifoliae,
new species, taxonomy, morphology, India 7134.
Diptiorhynchus,
new genera, taxonomy 8714.
Diptiorhynchus sinuatus,
new species, taxonomy, morphology, India, West Bengal 8714.
Dirhininae,
systematics, morphology, keys, India 7212.
Diria pulleni,
new species, taxonomy, morphology, New Guinea 4910.
Dirofilaria,
pathogens, susceptibility, genetics, *Aedes aegypti* 2623
Dirofilaria immitis,
disease transmission, vectors, *Aedes vexans*, *Aedes sierrensis*, USA, California 4494
infection, vectors, *Aedes trivittatus*, *Aedes vexans*, USA, Indiana 9270.
parasites, hosts immune response, *Aedes trivittatus* 1031.
parasites, vectors, *Armigeres subulbatus*, Malaysia 6057
vectors, disease transmission, *Camis familiaris*, *Aedes sierrensis*, USA, California 6073.
Diphyrs,
taxonomy, morphology 4024.
Discharges,
conidia, larvae infection, Entomophthora, *Mamestra brassicae* 3410.
Discophora doctog,
new species, taxonomy, morphology, Philippines, Negros I 4889.
Discrimination,
age, body size, mate selection, courtship, *Pieris protodice* 4297.
gustatory stimuli, sugars, amino acids, allelochemicals, *Lygus lineolaris* 5163
hosts, oviposition experience, *Pieris rapae crucivora*, *Apanetes glomeratus* 7497
mechanical stimuli, wind, escape behavior, *Periplaneta americana* 2752.
parasites, infection, nuclear polyhedrosis virus, *Lymantria dispar*, *Apanetes melanocellus* 5942.
Discrimination learning,
color, Hymenoptera 5121.
X disease,
transmission, infectivity, *Macrosteles fascifrons* 4191.
vectors, abundance, vegetation patterns effects on, orchards, Cicadellidae 3836.
vectors, orchards colonization, Cicadellidae 6173.

Disease control,

- African trypanosomiasis, vectors, Glossina, Uganda 4495.
aldicarb, disease transmission, ryegrass mosaic virus, Acar 1467.
bluetongue virus, vectors, *Culicoides variipennis* 4510.
chalkbrood disease, *Apis mellifera* 2234.
disease transmission, reviews, Arthropoda 9246.
filariasis, population levels, vectors, *Anopheles farauti*, Guadalcanal 1357.
fumigation, ovine vectors, *Bluetongue virus*, *Culicoides variipennis* 4519.
malarial, genetic variance, *Anopheles culicifacies*, Sri Lanka 9430
malarial, human impact, roads, Brazil, Amazonas 8421
malarial, inhibition, fertilization, gametes, *Plasmodium gallinaceum* 4483.
malarial, research programs, *Anopheles* 9267
malarial vectors, pesticide resistance, reviews 644.
onchocerciasis, epidemiology, mapping, computers, Africa, Volta R. Basin 6068.
pigs, *Anophara* 642.
plantations colonization effects on, *Trypanosoma*, *Glossina pallidipes*, Africa 1267.
scabies, domestic animals, ivermectin, *Psoroptes ovis* 6892.
sheep scab, diazinon, *Psoroptes communis* 646.
Trypanosoma, reviews, Glossina, Africa 6052.
vectors, bluetongue shoestring virus, insecticides, Illinois pepper 4630.
vectors, disease transmission, sanitation, tropical environment, *Culex pipiens* 1356.
vectors, *Onchocerca volvulus*, *Simulium neavei*, Africa 1327.
viruses, vectors, crop fields, oils, Aphididae 7697.
Disease reservoirs,
Colorado tick fever, *Dermacentor andersonei*, Rodentia, USA 637.
control, *Culex pipiens*, Africa 1316.
disease transmission, African trypanosomiasis, Glossina, Africa, West 1339.
ecological distribution, African trypanosomiasis, *Glossina palpalis*, Glossina tacinoides, Africa, West 1343
ecological distribution, *Anopheles messeae*, Yugoslavia 670.
geographical distribution, surveys, *Culicoides*, Australia, Ord R. 671.
Mayaro virus, yellow fever virus, *Haemagogus janthinomys*, Brazil 625.
Parasites, Chagas' disease, *Rhodnius pallescens*, Mammalia, Panama 667.
rabies virus, virulence, *Phlebotomus rugicollis*, Mustafa 7633.
Trypanosoma cruzi vectors, habitat, *Triatoma arthurneivai*, Brazil, Minas Gerais State 5283.
Disease resistance,
American foulbrood, breeding, apiculture, *Apis mellifera* 3823.
biotypes, susceptibility, pathogens, *Erynia neoaphidis*, *Acyrtosiphon pisum* 8128.
brood disease, larvae removal, workers, *Apis mellifera* 8589.
experimental infection, *Ornithodoros moubata*, *Rickettsia akari* 8994.
genetics, granulosis virus, *Phthorimaea operculella* 6239.
host plants, plum pox virus, *Myzus persicae*, *Myzus varians*, *Prunus persica* 1259.
pathogens, microorganisms, Insecta 7370.
stalk rot, *Ostrinia nubilalis* infestation effects on, Zea mays 8496.
Venezuelan equine encephalitis virus infection, *Culex taeniopus* 9001.
Disease resistance,
pollution effects, exhausts, *Apis mellifera* 1940.
Disease spread,
population structure, historical account, *Phlebotomus papatasi*, *Phlebotomus sergenti*, Yugoslavia, Serbia 602.
Disease transmission,
African trypanosomiasis, cattle, Diptera 1338.
African trypanosomiasis, environmental factors, Glossina, Uganda, Kenya 1347.
African trypanosomiasis, environmental factors, Trypanosoma, Glossina 1337.
African trypanosomiasis, Glossina moritans 3675.
African trypanosomiasis, population density, ecological distribution, Glossina palpalis palpalis, Ivory Coast 1342.
African trypanosomiasis, water management effects on, vegetation patterns, geographical distribution, Glossina 1344.
anaplasmosis, cattle, *Hippobosca rufipes*, *Stomoxys calcitrans* 2169.
Anopheles atroparvus, new records, France, Lyon 1571.
babesiosis, livestock, *Boophilus microplus* 3832.
barley yellow dwarf virus, *Rhopalosiphum padi* 8468.
barley yellow dwarf virus, *Rhopalosiphum padi* 9293.
barley yellow dwarf virus, vectors, *Rhopalosiphum rufiabdominalis* 7649.
bean yellow mosaic virus, *Vicia faba* host plants, *Myzus persicae*, *Aphis fabae* 3707.
best western yellows virus, strains, *Myzus persicae*, USA, Washington 6139.
biological control, pathogens, *Anopheles stephensi*, disease transmission 654.
Breinlia sergenti vectors, *Culex pipiens pallens*, *Aedes albopictus*, China, People's Rep., Yunnan Province 5288.
Brugia malayi vectors, *Mansonia bonnea*, *Mansonia annulata*, *Mansonia uniformis*, *Mansonia dives*, Indonesia, Bengkulu 6062.
Carica papaya necrosis, rhabdovirus, *Empoasca paypay*, Venezuela 7660.
cattle, parasites, *Hyalomma marginatum rufipes*, new species, *Babesia occultans* 6065.
chemical control, imidaclopridipronate, *Babesia bigemina*, *Boophilus decoloratus* 6064
Chikungunya virus, comparative studies, *Ornithodoros savignyi*, *Culex*, *Aedes*, *Mansonia* 1380.
control programs, African trypanosomiasis, man, cultural characteristics, Glossina, Africa, East 1341.
control programs, decamethrin, male sterility, Glossina, Upper Volta 1345.
control programs, insecticides, effects on nontarget organisms, wildlife management, Glossina 1346.
dengue virus, vectors, *Aedes albopictus*, Malaysia 4502.
disease control, reviews, Arthropoda 9246.
disease reservoirs, dispersion, African trypanosomiasis, Glossina, Africa, West 1339
domestic animals, Cowdria ruminatum, *Amblyomma sparsum* 2175.
ecological distribution, African trypanosomiasis, *Glossina palpalis*, Glossina tacinoides, Africa, West 1343.
epidemiology, infestation, man, Pediculidae 2916.
epidemiology, tick-borne encephalitis virus, Ixodidae 9229.
epidemiology, malaria, *Ixodes redikorzevi*, USSR, Stavropol 9232.
eradication, control programs, Glossina, Africa 1362.
filariasis, disease control, chemical control, DDT, *Anopheles farauti*, Guadalcanal 1357.
flight activity, settling behavior, *Rhopalosiphum padi* 3562.
flight, range, *Culicoides variipennis* 2103.
fruit rot, *Rhizopus artocarp*, Insecta 2232.
hematophagy, life cycle pests, *Stomoxys calcitrans*, Tabanidae 3743
imported diseases, exanthematous typhus, man, case reports, *Rhipicephalus sanguineus* 1332.
infectivity, cattle, *Babesia bigemina*, *Boophilus decoloratus* 8420
infectivity, Glossina moritans, *Trypanosoma concolor* 1340.
Ixodes dammini, babesiosis, *Babesia microti*, hamsters, *Peromyscus leucopus* 8422.
Leishmania, Trypanosoma, host selection, Lutzomyia, Panama 653
leishmaniasis, epidemiology, *Lutzomyia umbratilis*, Guyana 9237.

Disease control, (continued)

9001.
Disease spread,
population structure, historical account, *Phlebotomus papatasi*, *Phlebotomus sergenti*, Yugoslavia, Serbia 602.
Disease transmission,
African trypanosomiasis, cattle, Diptera 1338.
African trypanosomiasis, environmental factors, Glossina, Uganda, Kenya 1347.
African trypanosomiasis, environmental factors, Trypanosoma, Glossina 1337.
African trypanosomiasis, Glossina moritans 3675.
African trypanosomiasis, population density, ecological distribution, Glossina palpalis palpalis, Ivory Coast 1342.
African trypanosomiasis, water management effects on, vegetation patterns, geographical distribution, Glossina 1344.
anaplasmosis, cattle, *Hippobosca rufipes*, *Stomoxys calcitrans* 2169.
Anopheles atroparvus, new records, France, Lyon 1571.
babesiosis, livestock, *Boophilus microplus* 3832.
barley yellow dwarf virus, *Rhopalosiphum padi* 8468.
barley yellow dwarf virus, *Rhopalosiphum padi* 9293.
barley yellow dwarf virus, vectors, *Rhopalosiphum rufiabdominalis* 7649.
bean yellow mosaic virus, *Vicia faba* host plants, *Myzus persicae*, *Aphis fabae* 3707.
best western yellows virus, strains, *Myzus persicae*, USA, Washington 6139.
biological control, pathogens, *Anopheles stephensi*, disease transmission 654.
Breinlia sergenti vectors, *Culex pipiens pallens*, *Aedes albopictus*, China, People's Rep., Yunnan Province 5288.
Brugia malayi vectors, *Mansonia bonnea*, *Mansonia annulata*, *Mansonia uniformis*, *Mansonia dives*, Indonesia, Bengkulu 6062.
Carica papaya necrosis, rhabdovirus, *Empoasca paypay*, Venezuela 7660.
cattle, parasites, *Hyalomma marginatum rufipes*, new species, *Babesia occultans* 6065.
chemical control, imidaclopridipronate, *Babesia bigemina*, *Boophilus decoloratus* 6064
Chikungunya virus, comparative studies, *Ornithodoros savignyi*, *Culex*, *Aedes*, *Mansonia* 1380.
control programs, African trypanosomiasis, man, cultural characteristics, Glossina, Africa, East 1341.
control programs, decamethrin, male sterility, Glossina, Upper Volta 1345.
control programs, insecticides, effects on nontarget organisms, wildlife management, Glossina 1346.
dengue virus, vectors, *Aedes albopictus*, Malaysia 4502.
disease control, reviews, Arthropoda 9246.
disease reservoirs, dispersion, African trypanosomiasis, Glossina, Africa, West 1339
domestic animals, Cowdria ruminatum, *Amblyomma sparsum* 2175.
ecological distribution, African trypanosomiasis, *Glossina palpalis*, Glossina tacinoides, Africa, West 1343.
epidemiology, infestation, man, Pediculidae 2916.
epidemiology, tick-borne encephalitis virus, Ixodidae 9229.
epidemiology, malaria, *Ixodes redikorzevi*, USSR, Stavropol 9232.
eradication, control programs, Glossina, Africa 1362.
filariasis, disease control, chemical control, DDT, *Anopheles farauti*, Guadalcanal 1357.
flight activity, settling behavior, *Rhopalosiphum padi* 3562.
flight, range, *Culicoides variipennis* 2103.
fruit rot, *Rhizopus artocarp*, Insecta 2232.
hematophagy, life cycle pests, *Stomoxys calcitrans*, Tabanidae 3743
imported diseases, exanthematous typhus, man, case reports, *Rhipicephalus sanguineus* 1332.
infectivity, cattle, *Babesia bigemina*, *Boophilus decoloratus* 8420
infectivity, Glossina moritans, *Trypanosoma concolor* 1340.
Ixodes dammini, babesiosis, *Babesia microti*, hamsters, *Peromyscus leucopus* 8422.
Leishmania, Trypanosoma, host selection, Lutzomyia, Panama 653
leishmaniasis, epidemiology, *Lutzomyia umbratilis*, Guyana 9237.

Subject Index

Disease transmission, (continued)

- leishmaniasis, *Phlebotomus* 2914.
leishmaniasis, *Phlebotomus*, Kenya 1355.
life cycle, weather effects on, mathematical models, *Ixodes ricinus* 1361.
luteovirus, localization, salivary gland, *Myzus persicae* 8148.
maize sterile stunt virus, vectors, *Peregrinus maidis*, *Sogatella kolophona*.
Sogatella longicauda 7646.
maize stripe virus, *Peregrinus maidis*, Zea mays 8455.
malaria, *Anopheles*, Pakistan 2911.
malaria, chemical control effects on, *Anopheles stephensi* 663.
malaria, disease control, research programs, *Anopheles* 9267.
malaria, imported diseases, Europe 4487.
malaria, inhibition, fertilization, gametes, *Plasmodium gallinaceum* 4483.
malaria, population dynamics, *Anopheles aquasalis*, French Guiana 1689.
malaria, population dynamics, *Anopheles arabiensis*, Senegal, Pitane 9239.
malaria, population genetics, *Plasmodium falciparum*, *Anopheles* 7629.
Mansuetoiosis, vectors, *Culicoides furens*, *Culicoides barbosa*, Haiti 4516.
Mayaro virus, yellow fever virus, *Haemagogus janthinomys*, Brazil 625.
mosaic disease, *Ootheca mutabilis*, *Medlythia thomasi*, *Vigna unguiculata*, Africa, West 547.
mosaic disease, vectors, *Megalurorhynchus sjostedti*, *Vigna unguiculata* 546.
new records, parasites, sheep, *Babesia motasi*, *Haemaphysalis punctata*, British Isles 4538.
nuclear polyhedrosis virus, *Anticarsia gemmatilis*, *Bombyx mori* 277.
nuclear polyhedrosis virus, *Spodoptera littoralis* 9279.
nymphs, *Babesia microti*, *Dermacentor marginatus*, *Dermacentor reticulatus*.
Haemaphysalis punctata, *Rhipicephalus sanguineus*, *Ixodes hexagonus* 8418.
onchocerciasis, control programs, geographical distribution, *Simulium*, Senegal 9249.
parasites, *Susceptibility*, *Sarcoptes scabiei*, Canada 1331.
pathogens, *Argas persicus*, *Argas affinis* 4501.
pathogens, *Erwinia carotovora*, *Insecta* 8493.
pathogens, feeding, *Xanthomonas malvacearum*, *Earias* 7380.
pathogens, *Metarhizium anisopliae*, *Hylobius pales*, *Macrocheles*, *Histogaster* 6047.
pathogens, *Metarhizium anisopliae*, *Reticulitermes* 8153.
pathogens, role, salivary gland, *Ixodidae* 2917.
pathogens, salivary gland, *Trypanosoma brucei*, *Glossina morsitans* 3674.
pea enation mosaic virus, *Lathyrus odoratus* 8488.
pest control, livestock, *Boophilus microplus*, Australia 2934.
pests, *Hafnia alvei*, *Cosmetia*, *Zealandia*, New Zealand, Canterbury 5723.
pests, literature reviews, *Culicidae* 1530.
plague, blood meals, man, *Xenopsylla gergeri*, *minax*, *Xenopsylla conformis* 9124.
plant diseases, abundance, *Coccidia*, *Pseudococcidia*, Ghana 1260.
plant diseases, cassava mosaic virus, *Bemisia tabaci* 7653.
plant diseases, mosaic disease, vectors, *Apis gossypii* 7652.
plant diseases, sugarcane streak virus, sugarcane mosaic virus, *Cicadulina bipunctata* zea, Egypt, Arab Rep. 8471.
plant diseases, viruses, *Myzus persicae*, *Lycopersicon esculentum* 7654.
plant viruses, *Aphididae*, Australia 3837.
plum pox virus, *Myzus persicae*, *Myzus varians* 1259.
population dynamics, dispersal, survival, *Anopheles culicifacies*, India 1296.
population dynamics, trypanosomiasis, *Glossina*, Ivory Coast 9264.
potato leaf roll virus, efficiency, *Myzus persicae*, *Macrosiphum euphorbiae* 3395.
potato leaf roll virus, insecticides effects on, crop fields, *Aphididae* 3042.
potato spindle tuber viroid, *Aulacorthum solani*, *Macrosiphum euphorbiae*, *Myzus persicae* 3704.
poxvirus, vectors, *Culex nigripalpus*, *Wyeomyia vanduzeei* 3697.
pumpkin mosaic virus, feeding behavior effects on infectivity, *Aphis craccivora* 3703.
rabies virus, *Vulpes*, *Phloeoxoides hexagonus*, *Phloeoxoides canisuga* 8414.
role, salivary gland, *Ixodidae* 2917.
ryegrass mosaic virus, *Acan* 1467.
scabies, *Sarcoptes scabiei* 1330.
signa virus, *Drosophila melanogaster* 5034.
soybean mosaic virus, crop fields, vectors landing behavior, *Aphididae*, *Glycine* 3825.
Spirochetosis, incidence, *Ixodidae*, USSR, Tajikistan, Isfarn 9242.
Spirochetosis incidence, *Ixodidae*, USSR, Tajikistan, Isfarn 9242.
Spirochetosis, infection, man, *Argasidae* 9245.
tick-borne encephalitis virus, epidemiology, mathematical models, *Ixodidae* 9248.
tick-borne encephalitis virus, experimental infection, *Ixodes persulcatus* 9252.
tick-borne encephalitis virus, pest control, acaricides, *Ixodes persulcatus* 9252.
tomato leaf curl virus, insecticides effects on, *Bemisia tabaci* 3705.
trypanosomiasis, control programs, trapping, *Glossina*, Congo, People's Rep. 9244.
trypanosomiasis, epidemiology, *Glossina*, Ivory Coast 9240.
trypanosomiasis, *Glossina fuscipes fuscipes*, Congo, People's Rep. 9243.
trypanosomiasis, socio-economic aspects, *Glossina*, Africa 652.
vectors, activity patterns, *Phlebotomus*, Yugoslavia 2766.
vectors, aging methods, *Diptera* 4493.
vectors, *Basidiomycetes* culture, *Verticillium fungicola*, *Megastelia halterata* 5394.
vectors, bean curly dwarf mosaic virus, bean mild mosaic virus, *Coleoptera*, Costa Rica 7658.
vectors, biological control, developing countries, *Insecta* 3666.
vectors, biological control, parasites, *Mermithidae*, *Culicidae* 3661.
vectors, breeding, habitat, *Rhipicephalus appendiculatus*, Africa 3683.
vectors, cadang-cadang, check lists, *Insecta*, Philippines 3804.
vectors, *Cans*, *Canis*, *Dirofilaria immitis*, *Aedes sierrensis*, USA, California 6073.
vectors, cattle, *Ornithodoros coriaceus*, *Chlamydia* 8413.
vectors, Colorado tick fever virus, *Dermacentor andersoni* 3655.
vectors, control programs, habitat alterations, salt marshes, *Culicidae*, USA, Georgia, Glynn Co. 1437.
vectors, cucumber mosaic virus, *Aphis gossypii*, *Myzus persicae*, Israel 7657.
vectors, *Dermacentor variabilis*, *Rickettsia prowazekii*, experimental infection 1322.
vectors, *Dirofilaria immitis*, *Aedes vexans*, *Aedes sierrensis*, USA, California 4494.
vectors, epidemiology, *Culicidae* 1373.
vectors, historical account, *Arthropoda* 2929.
vectors, host preferences, *Aedes*, *Culex*, USA, Iowa 1198.
vectors, *Hyalomma anatolicum*, *Boophilus microplus*, *Insecta* 2183.
vectors, Japanese encephalitis virus, *Culex pseudovishnui*, *Culex tritaeniorhynchus*, *Culex bitaeniorhynchus*, India 2937.
Disease transmission, (continued)
vectors, *Karu virus*, sheep, *Rhipicephalus evertsi* 4512.
vectors, leaf-curl, *Cucurbita maxima*, *Bemisia tabaci* 7656.
vectors, life history, *Aedes africanus* 3687.
vectors, medical importance, *Cimex* 1354.
vectors, Nairobi sheep disease virus, *Rhipicephalus appendiculatus* 4511.
vectors, *O'nyong-nyong virus*, isolation, *Anopheles fuscus*, Kenya 1466.
vectors, *Phytomonas davidi*, *Pachybrachius bilobatus scutellatus* 8363.
vectors, predators, biological control, *Toxothrypanes*, *Culex* 2861.
vectors, repellents, comparative studies, *Simulium*, Brazil, Amazon Basin 1364.
vectors, rice tungro virus, *Nephotettix virescens* 7651.
vectors, Ross River virus, *Aedes polynesiensis*, *Aedes aegypti* 3695.
vectors, Ross River virus, *Culex pipiens quinquefasciatus* 7652.
vectors, sanitation, tropical environment, *Culex pipiens* 1356.
vectors, sorghum stunt mosaic virus, *Graminella sapor* 7659.
vectors, tick-borne encephalitis virus, *Haemaphysalis inermis*, *Micromys minutus* 4491.
vectors, tomato spotted wilt virus, *Scirtothrips dorsalis*, *Franklinella schultzei* 6909.
vectors, tomato yellow leaf curl virus, *Bemisia tabaci* 7655.
vectors, *Tratoma sordida*, *Tratoma brasiliensis*, *Tratoma pseudomaculata*, *Tratoma infestans*, *Panstrongylus magnus*, *Rhodnius nasutus*, Brazil 5286.
vectors, vascular bacteriosis, check lists, *Xanthomonas manihoti*, *Manihot esculenta*, *Insecta* 4528.
venezuelan equine encephalitis virus, blood meals, *Aedes aegypti* 4504.
Venezuelan equine encephalitis virus, *Culex taeniorhynchus* 9001.
Venezuelan equine encephalitis virus, *Culex taeniorhynchus* 3400.
viruses, deltamethrin effects on, *Myzus persicae* 6954.
viruses, host plants, repellents effects on, *Myzus persicae* 6979.
viruses, *Oryza sativa*, *Laodelphax striatella* 1384.
watermelon mosaic virus, *turnip mosaic virus*, role, helper factor, *Myzus persicae* 3706.
wilt, *Onchopeltus ciungulifera*, Trinidad 5414.
yellow fever virus, epidemiology, rain forests, *Aedes africanus*, Ivory Coast 9230.
yellow fever virus, vectors, *Haemagogus equinus* 1379.
yellows, *Beta vulgaris*, *Aphis craccivora*, *Aulacorthum solani*, *Macrosiphum euphorbiae*, *Myzus persicae*, *Tasmania* 6097.
Diseases, apiculture, biogeography 5760.
bacteria, pathogenesis, immune response 7374.
demonstration virus, reviews, *Bombyx mori* 8988.
malaria, epidemiology, *Culicidae*, *Plasmodium*, *Spheniscus demersus* 1377.
Nosema apis, *Apis mellifera*, USA 4194.
pathogenesis, books, *Insecta* 7920.
pathogenesis, effects on, *Nosema*, *Galeruca rufa* 281.
pathology, bacteria, *Insecta* 7366.
resistance, silviculture, *Pinus strobus*, *Curculionidae* 1393.
scabies, case reports treatment 648.
vectors, *Musca domestica*, *Stenomys caletans*, *Fannia canicularis*, *Drosophilidae*, Germany, Fed. Rep. 632.
Dissemination, taxonomic revision, new taxa, morphology, *Dissemination*, North America 5549.
Disinfection, mass rearing, methodology, *Megachile rotundata* 60.
methyl bromide, apiculture, *Bacillus* larvae, *Ascothraupa* 8527.
Disintegration, spores, parasites, *Nosema* apis, *Apis mellifera* 6610.
Disomorphia amphibiae berce, immature stages, life history, host plants 1955.
Dispersal, stragglers, *Portulaca monacha* 6930.
Dispersal, adults, life span, duration, *Pieris rapae crucivora* 4325.
age, seasonal variations, capture-recapture studies, *Anopheles culicifacies*, Sri Lanka 5979.
biotope, coastal environment, *Tetragnatha*, Japan, East China Sea 2101.
association, host plants, *Aphididae* 8372.
capture-recapture studies, host plants, larvae, *Lymantria dispar* 6813.
colonies, spatial distribution, *Formicidae*, Panama 4649.
comparative studies, mass rearing, *Dacus cucurbitae*, 2768.
crop fields damage, pest control, *Aphis fabae*, British Isles 3800.
disease transmission, nuclear polyhedrosis virus, *Spodoptera littoralis* 9279.
environmental factors, *Lepidoptera* 5976.
environmental factors, population density, predator-prey interactions, *Amblyseius* 560.
feeding behavior, activity patterns, mating behavior, *Batocera lineolata* 2789.
flight activity, colonization, freshwater environments, *Insecta* 6230.
flight activity, life cycle, *Hypera* potato 8061.
flight activity, marking, Brazil, Argentina, *Triatoma infestans* 1263.
flight activity, ovary development, *Hippodamia convergens* 9171.
flight activity, pests, crop fields, *Schizaphis graminum* 3710.
flight activity, population dynamics, *Triurhoda virgata*, *Triurhoda borealis* 8360.
flight activity, seasonal variations, *Tetraneura tetraephalus*, USA, Vermont, USA, New Hampshire 443.
flight, *Callosoma promethes* 7590.
flight, ovary development, environmental factors, *Hippodamia convergens* 9171.
flight range, capture-recapture studies, *Glossina fuscipes* quanzensis, Congo, People's Rep. 4490.
geographical distribution, introduced species, *Chrysomya chloropyga*, *Chrysomya megacephala*, *Chrysomya albiceps*, Brazil 9172.
geographical distribution, *Therionopsis trifolii maculata* 1964.
habitat effects on, *Pardosa* 4427.
habitat, *Nymphalidae* 7594.
habitat selection, *Gerris pingreensis*, *Gerris comatus*, *Gerris buenoi* 3867.
host plants, foliage, *Lymantria dispar* 5980.
host searching behavior, host-parasite interactions, *Trichogramma pretiosum*, *Heliothis zea*, USA, Georgia 2023.
introduced species, pollinators, population establishment, orchards, *Osmia lignaria* propinqua 9295.
iodine radioisotopes, trophallaxis, *Bifiditermes beesonii* 2554.
larvae, eggs, *Pulvinaria mesembryanthemi*, USA, California 2160.
larvae, geographical distribution, *Danania plexipus*, USA, Wisconsin 7566.
locomotion, flight activity, *Dacus tryoni* 5977.
migrations, deserts, population genetics, *Drosophila*, USA, California, Death Valley 6814.

Dispersal, (continued)

- movements, spatial distribution, sexual dimorphism, *Tetraopes tetraophthalmus*, *Tetraopes leioratus* 6816.
- nymphs, legumes, *Nezara viridula*, *Phaeodorus guildinii*, Brazil 559
- parasites, *Aleuracanthus woglumi* biological control, *Amutis hesperidum*, *Encarsia opulenta*, USA, Florida 4544
- pests, crop fields, *Tetranychidae* 6976.
- pests, ornamental plants, *Hyadaphis tataricae*, *Lonicera*, USA 7793.
- phototaxis, *Hydropsyche cockerelli* 8006
- phototaxis, larvae, *Hydropsyche cockerelli*, USA, Columbia R. 5435
- Phytophthora palmivora, role, *Rhedeole megacephala*, *Planococcoides njalensis* 9327.
- pollen, effects on population genetics, *Diamorpha smallii*, *Formica* 553.
- pollination, orchards, *Osmia lignaria propinqua* 5342.
- population dynamics, *Drosophila*, USA, North Carolina 3634
- population establishment, pollinators, *Osmia lignaria propinqua*, USA, California 9286.
- population studies, females, *Aedes africanus*, Uganda 1295
- predator-prey interactions, Carabidae, *Myzus persicae*, British Isles 8391
- predators, population density, *Phytoseiulus persimilis*, *Amblyseius degenerans* 4468
- seeds, community structure, forests, *Formicidae* 3602
- sex differences, population density, *Musca vetustissima*, Australia 1311
- social behavior, sound production, *Cystosoma saundersi* 2283
- spatial distribution, atmospheric conditions, pest control, *Chironsteura fumiferana*, Canada, New Brunswick 705
- sterilized organisms, rearing, *Ceratus capitata* 6136
- survival, nuclear polyhedrosis virus marking, females, *Hyphantia cunea* 2858
- survival, population dynamics, disease transmission, *Anopheles culicifacies*, India 1296.
- survival, rearing comparison, *Trichoplusia ni* 1168.
- swarms, engorgement, workers, *Apis mellifera adansonii* 5210
- territorial behavior, *Calopteryx cornelia*, Japan, Fukuoka, Murom R 8612.
- vegetation patterns effects on, *Glossina morsitans* 2784.
- wind, parasites, *Scelio fulgidus* 4451.
- wind, pests, *Homoeosoma electellum*, USA, Gulf Coast, Canada, Saskatchewan 2100.
- Dispersion,**
- aggregation, spatial distribution, *Thrips tabaci* 4420.
- crop fields, *Diabrotica longicornis*, Zea mays, USA, Iowa 6118.
- disease transmission, disease reservoirs, African trypanosomiasis, *Glossina*, Africa, West 1339.
- flight, measuring techniques, *Tetraopes tetraophthalmus* 2099
- larvae, competition, substrate preferences, *Chironomidae*, USA, Michigan, Hunt Creek 2289.
- life cycle, *Aedes cataphylla* 6712.
- nectar, foraging behavior, pollinators, *Impatiens capensis* 6793.
- new records, *Chelostoma compenulatum*, *Chelostoma fulviginum*, USA, New York 2365.
- pests, seasonal variations, host plants, *Leucinodes orbonalis*, India, Sabour 7741.
- pheromones, effects on larvae, intraspecific relationships, *Blattella germanica* 1161
- pollination, interspecific relationships, *Pedicularis*, *Bombus*, USA, Alaska, Alaska 4404.
- pollinators, flowering phenology, *Yucca whipplei*, *Tegeticula maculata* 8347.
- population dynamics, *Heteronychia arator*, New Zealand, North Is. 1300.
- synthetic pheromones, efficacy, pest control 2203.
- Displacement,**
- competition, nests, *Camponotus laevis*, *Formica haemorrhoidalis* 6855.
- Display,**
- courship, agonistic behavior, use, systematic, *Salicidae* 8731.
- courship, *Platycypha fitzsimoni*, *Chlorocypha consueti*, *Rhinocypha unimaculata* 6667.
- mating behavior, activity patterns, *Eldana saccharina* 1906.
- visual discrimination, distance, conspecifics, *Portia fimbriata* 5668.
- wagtail dance, food sources, orientation, sky, *Apis florea* 8267.
- Diseases,**
- communication, synthetic sex pheromone effects on, *Grapholita molesta* 415.
- mating behavior, pest control, (Z, Z)-11, 13-Hexadecadienal, *Ameylois transiella* 2219.
- mating behavior, pheromone traps, pest control, *Ameylois transiella* 8507.
- mating behavior, sex pheromone, biological control, *Heliothis virescens* 3763.
- mating behavior, sex pheromone pest control, effects on, *Dermacentor variabilis* 1907.
- mating behavior, synthetic sex pheromone, pest control, *Eucosma sonomana* 8584.
- sex pheromone attractancy, synthetic components, *Choristoneura fumiferana* 2756.
- Dissection,**
- methodology, females genitalia, *Ixodoidea* 62.
- methodology, microbubbles stability, *Insecta* 106.
- methodology, salivary gland, gut, *Glossinidae* 4080.
- Dissemination,**
- wind dispersal, pests, *Homoeosoma electellum* 2100.
- Dissolcus japonicus,**
- morphology, taxonomy 4020.
- Dissosteria carolina,**
- mating behavior, aggressive behavior, sound production (biological) 1151
- Disturbance,**
- construction, effects on community composition, vegetation patterns, *Arthropoda* 1284.
- effects on stridulation, defense mechanisms, *Megaloblatta blaberoides* 4341.
- Disulfoton,**
- bioaccumulation, toxicity, larvae, *Bombyx mori* 2663.
- insecticides, systemic, toxicity, pesticide residues, *Apis gossypii* 7413.
- Diterpenes,**
- antifeedants, bioassays, larvae, *Spodoptera litura* 2654.
- defense secretions chemical composition, comparative studies, *Nasutitermitinae* 1566.
- Diterpenoids,**
- mitochondria inhibition, ovary, *Rabdosis*, *Macrotermes subhyalinus* 2556.
- Dithrya guttularis,**
- geographical distribution, occurrence, British Isles 6310.
- Diuresis,**
- fluids adsorption, midgut, *Rhodnius prolixus* 5679.
- ion transport inhibitors effects on, *Glossina morsitans* 4994.
- water balance, flight, hemolymph, *Rhodnius prolixus* 7351.
- Diurnal variations,**
- abundance, crop fields pests, *Cyclas formicarius elegantulus* 4535.

Diurnal variations, (continued)

- abundance, species diversity, leaf litter, *Arthropoda* 2883.
- activity patterns, alpine populations, geographical variations, temperature, *Glossina pallidipes*, Kenya 7525
- activity patterns, mangrove swamps, *Culicoides*, USA, Florida 4419.
- activity patterns, sand flats, *Dasyutilla*, USA, Michigan 7518.
- biomass, grasslands, *Orthoptera*, *USSR* 9198.
- emergence, pests, *Chilo partellus*, India 5135.
- exploratory behavior, parasites, silk, exposure time, *Apanteles melanoscelus*, *Lymantria dispar* 1219.
- feeding behavior, *Locusta migratoria* 8303.
- flight activity, abundance, traps, *Culicidae* 7617.
- flight activity, feeding behavior, *Helicoverpa armigera* 7521.
- flight activity, measuring techniques, *Tortricidae* 472.
- flight activity, periodicity, *Delphacidae*, *Cicadellidae* 6711.
- flight activity, seasonal variations, *Trialeurodes vaporariorum*, *Encarsia formosa* 9116.
- flight activity, temperature effects on, *Rhopalosiphum padi* 7516.
- flight activity, traps, *Tortricidae* 52.
- flight, light, mobility, *Helicoverpa armigera* 6693.
- foraging behavior, pollen, *Apis mellifera*, USA, Mays 5923.
- heat tolerance, *Trigonostethus* 6581
- locomotor activity, measuring techniques, *Thanasimus dubius* 1742.
- movements, host plants, thermoregulation, *Dactylorhiza bicolor* 4319.
- nectar secretion, effects on feeding behavior, *Brassica campestris*, *Apis* 544.
- oviposition, aggregation, environmental factors, *Zonocerus variegatus* 3523.
- oviposition, *Culicidae* 3525
- oviposition, mating, *Rhagoletis mendax* 3639
- parasites abundance, digestive tract, *Thelastoma bulbois*, *Periplaneta americana* 2642.
- photoreceptors, ultrastructure, sensitivity, *Acrididae* 147.
- physical activity, resting behavior, environmental effects, temperature, humidity, *Diptera* 4316.
- seasonal variations, biting behavior, *Simuliidae*, Guatemala 659.
- sound production (biological) patterns, *Glossina morsitans* 261.
- sound production (biological), tropical environment, *Cicadidae* 5117.
- temperature simulation, laboratories, methodology 1684.
- Divergence,**
- cold tolerance, population-environment relations, geographical variations, *Eurosta solidaginis* 2603.
- heterozygosity, allozymes, *Drosophila* 3920.
- nucleotide sequence homology, DNA hybridization, *Drosophila* 5453.
- reproductive strategy, population genetics, temperate environment, tropical environment, *Drosophila melanogaster* 7057.
- Division of labor,**
- feeding behavior, caste differentiation, social organization, *Pogonomyrmex* 2282.
- nesting behavior, colonial characteristics, *Melipona favosa* 7005.
- Dixa pseudindiana,**
- new species, taxonomy, morphology, USA, Minnesota 2416.
- Dixella nixiae,**
- new species, morphology, Honduras 29.
- Dixella nova,**
- morphology, larvae 8035.
- Dixippus morosus,**
- eggs, pathology, *Pleistophora dixippi* infection 9008.
- DNA,**
- characterization, viruses, isolation, *Campoplex sonorensis* 8122.
- chromatin, binding, light, *Drosophila melanogaster* 1510.
- chromatin isolation, proteins, *Trichoplusia ni* 7049.
- clones, genetic analysis, *Drosophila melanogaster* 1495.
- clones, genomes, reviews, *Drosophila melanogaster* 6248.
- content, mating behavior correlation, *Atta laevigata* 1137.
- fragmentation, aging, *Drosophila melanogaster* 4239.
- genes, gene mapping, *Drosophila melanogaster* 1500.
- genes, nucleotide sequence, evolution, *Drosophila melanogaster* 7879.
- genetic analysis, hybridization, *Drosophila melanogaster* 3917.
- genomes, avian sarcoma virus, integration, eggs, embryos, *Drosophila melanogaster* 9379.
- genomes, gene regulation, reviews, *Drosophila* 9380.
- genomes organization, globin loci, *Drosophila* 7823.
- heteroduplex analysis, kinetoplasts, *Cnithidia luciliae* 8627.
- hybridization analysis, nuclei RNA, larvae, *Drosophila* 6240.
- hybridization, fluorescence RNA, *Drosophila melanogaster*, *Drosophila hydei* 2304.
- hybridization, nucleotide sequence homology, divergence, *Drosophila* 5453.
- levels, metamorphosis effects on, *Bombyx mori* 952.
- localization (RNA) genes, tyrosine, *Drosophila melanogaster* 2303.
- methylating, RNA biosynthesis, polytene chromosomes, *Scara coprophila* 7833.
- mitochondria, restriction endonuclease mapping, *Drosophila melanogaster*, *Drosophila virilis* 3875.
- mutation, isolation, methodology, *Drosophila melanogaster* 1509.
- nomads, biochemical analysis, *Drosophila melanogaster* 5681.
- nuclear polyhedrosis virus, infectivity, biological control, *Trichoplusia ni* 1034.
- nucleotide sequence, Balbiani rings, chromosomes, salivary gland, *Chironomus tentans* 7830.
- nucleotide sequence, collagen gene, *Drosophila melanogaster* 8625.
- nucleotide sequence, duplication, hybridization, *Bombyx mori* 4661.
- nucleotide sequence, genes homology, transposition, *Drosophila melanogaster* 1504.
- nucleotide sequence, heat shock genes, *Drosophila melanogaster*, *Drosophila simulans* 7834.
- nucleotide sequence, heat shock proteins genes, *Drosophila melanogaster* 8631.
- nucleotide sequence, plasma proteins, *Drosophila* 3876.
- nucleotide sequence, repeated sequence, *Drosophila melanogaster* 7822.
- nucleotide sequence, restriction endonuclease, sex differences, *Drosophila* 3076.
- nucleotide sequence, transposon mdg3 repeated sequence, *Drosophila melanogaster* 9382.
- nucleotide sequence, transposon 412 repeated sequence, *Drosophila melanogaster* 9381.
- nucleotide sequence, transposons, *Drosophila* 4669.
- nucleotide sequence, transposons, *Drosophila melanogaster* 1502.
- nucleotide sequence, tRNA Lys genes, *Drosophila melanogaster* 9396.
- palindromes, characterization, *Drosophila melanogaster* 2338.
- polymorphism, restriction endonuclease, *Drosophila* 3062.
- polytene chromosomes, salivary gland, *Chironomus plumosus* 7847.
- protein biosynthesis, embryogenesis, *Hyalomma dromedarii* 5829.

DNA, (continued)

- proteins, characterization, baculovirus, *Heliothis zea* 3392
 purification, microarray, polytene chromosomes, *Charoninus* 8621
 reassociation, population genetics, interspecific hybridization, *Drosophila* 1557
 repeated sequence, genetic variance, species, *Drosophila* 8639
 repeated sequence, Y chromosome, hybridization analysis, *Drosophila hydei* 9386
 replication, termination, DNA polymerase I, *Drosophila melanogaster* 7831
 restriction endonuclease mapping, hybridization analysis, rRNA genes, *Attacus ricini* 9393
 salivary gland, *Bradyia spattergum* 3883
 sequence, genes, B104, characterization, *Drosophila melanogaster* 6241
 structure, genes linkage, evolution, *Antheraea polyphemus* 1492
 5-terminals, deoxyribonuclease I hypersensitivity sites identification, association Sg4 gene, *Drosophila* 6250
 transcription, enzymes, histone acetyltransferase, *Drosophila melanogaster* 5680
 transcription, RNA polymerase, genes, *Drosophila* 1507
 α -tubulin transcription, oogenesis, embryogenesis, *Drosophila melanogaster* 6242
- DNA biosynthesis**, chromosomes, *Anopheles stephensi* 2305
 diflubenzuron effects on, *Stomoxys calcitrans* 1512
 5-fluorodeoxyuridine effects on, larvae, *Chironomus* 2299
 inhibitory, diflubenzuron, pupae, *Stomoxys calcitrans* 1043
 nuclear polyhedrosis virus, infection, *Bombix mori* 3398
 polyplodization, fat body, growth, metamorphosis, *Schistocerca gregaria* 7832
 protein composition, silk gland, instars, *Phalaena cyathia ricina* 2727
 RNA biosynthesis, fat body, *Coccinella septempunctata* 935
 salivary gland, *Bradyia spattergum* 1540
- DNA polymerase**, association DNA primase, embryos, *Drosophila melanogaster* 9066
 induction, nuclear polyhedrosis virus, infection, *Trichoplusia ni* 1035
- DNA polymerase I**, DNA replication, *Drosophila melanogaster* 7831
- DNA primase**, association DNA polymerase, embryos, *Drosophila melanogaster* 9066
 priming activity, embryos, *Drosophila melanogaster* 8626
- DNA repair**, deficient mutant, procabazine induction, *Drosophila melanogaster* 2324
 excision, loki, mutants, *Drosophila melanogaster* 5444
 females, mating, chromosomes, lesions, males, *Drosophila melanogaster* 6264
 kinetics, *Drosophila melanogaster* 7030
 mutation, replication, chromosomes, *Drosophila melanogaster* 7037
 oocytes, mutants, radiation damage, chromosomes, spermatozoa, *Drosophila melanogaster* 6261
 sex chromosomes lesions, deficient mutant, *Drosophila* 5474
 X radiation, recombination, *Drosophila melanogaster* 3063
- cdNA**, clones, chorion genes, developmental stages, *Bombix mori* 6249
 hybridization analysis, gene expression, heat shock proteins, stimulation
 ecdysterone, cell lines, *Drosophila* 7835
 hybridization, mRNA poly(A) containing, gene expression, silk gland, larvae, *Bombix mori* 8112
 hybridization, mRNA, salivary gland, *Chironomus tentans* 7829
 nucleotide sequence, Balbiana rings genes, *Chironomus thummi* 6247
 nucleotide sequence, chorion genes, proteins, *Bombix mori* 8630
 nucleotide sequence, histone H3 genes, insertion sequences insertions sites, gene libraries, *Drosophila melanogaster* 8628
 nucleotide sequence, immunoglobulin heavy chains switch regions, *Drosophila* 6251
 probes gene regulation, *Drosophila melanogaster* 3886
 rRNA Val genes, cell-free system transcription, *Drosophila melanogaster* 9389
 salivary gland chromosomes, gene amplification, *Rhynchosciara americana* 7837
 transcription, rRNA genes, cell-free system, *Drosophila melanogaster* 8624
 YPI gene, YPII gene, nucleotide sequence, comparison mRNA, *Drosophila melanogaster* 5455
- Dobsonia moluccensis**, hosts, parasites, *Whartonia kulamadouensis*, Irian Jaya 797
- Dobsonia pannienalis**, hosts, parasites, *Whartonia kulamadouensis*, Papua New Guinea 797
- (E)-9,11-Dodecadien-1-yl acetate, sex pheromone chemical composition, *Rhyacionia frustrana* 214
- (Z)-9,11-Dodecadien-1-yl acetate, synthesis, sex pheromone, *Diparopsis castanea* 1777
- Dodecanol acid**, effects on viruses disease transmission, host plants, *Myzus persicae* 6979
- (E)-9-Dodecen-1-yl acetate, sex pheromone chemical composition, *Rhyacionia frustrana* 214
- (E)-10-Dodecen-1-yl acetate, synthetic sex pheromone, pest control, dose, *Cydia nigricana* 696
- (Z)-7-Dodecenyl acetate, sex pheromone components, effects on flight activity, *Trichoplusia ni* 419
- Z-5-Dodecenyl acetate, sex pheromone, pest control, efficacy, *Euxoa ochrogaster* 742
- Z-7-Dodecenyl acetate, sex pheromone, pest control, efficacy, *Euxoa ochrogaster* 742
- Z-9-Dodecenyl acetate, sex pheromone, pest control, efficacy, *Euxoa ochrogaster* 742
- Dodecyl acetate**, sex pheromone components, effects on flight activity, *Trichoplusia ni* 419
- Dolania**, new records, geographical distribution, USA, Louisiana 3164
- Dolerinae**, check lists, species composition, Europe, Carpathian Basin 8682
- Dolerus lepidus**, taxonomy, morphology, USSR 4102
- Dolerus porcatus**, taxonomy, morphology, USSR 4102
- Dolerus rufus**, taxonomy, morphology, USSR 4102
- Dolerus geniculata**, interspecific hybridization, sympatric populations, *Dolichopoda laetitia* 7863
- Dolichopoda laetitia**, interspecific hybridization, sympatric populations, *Dolichopoda geniculata* 7863
- Dolichopodidae**, emergence, species composition, abundance, phenology, geographical distribution, Germany, Fed. Rep 3865

- Dolichovespa saxonica**, ontogeny, developmental stages, embryogenesis 6636
- Dolichovespa asiatica**, taxonomy, morphology 4036
- Dolichovespa saxonica**, queens, nest building, nesting behavior 4640
- Dolichovespa sylvestris**, taxonomy, morphology, keys 4036
- Dolophidius major**, larvae, pupae, morphology, geographical distribution, USA, Southeast 1716
- Domestic animals**, *Camelus dromedarius*, infestation, pathology 6891
 case reports, bovine demodicosis, Demodex bovis, Nigeria 6075
 cattle, infestation, pests, bromonics, *Ctenocephalides felis orientis*, India 8427
 cattle, pest resistance, immune response, *Hypoderma lineatum* 6882
 disease control, scabies, ivermectin, *Psoroptes ovis* 6892
 disease transmission, *Cowdria ruminantium*, *Amblyomma sparsum* 2175
 disease transmission, pathogens, *Argas persicus*, *Argas africanus* 4501
 ectoparasites, transmission, *Psoroptes ovis*, *Ovis canadensis* 651
 ectoparasites, abundance, predators, *Arthropoda*, Uganda 2896
 histology, bites, case reports, *Dermacentor* 4488
 hosts, blood meals, females, *Psoroptes ovis*, USA, Texas 6074
 infestation, case reports, *Lynxaxia radovskyi*, USA, Florida 2922
 infestation, pest control, ivermectin, *Psoroptes communis* 7640
 infestation, seasonal variations, *Ixodidae*, Egypt 6895
 parasites, control programs 1418
 parasites, site preferences, *Ixodes scapularis* 6890
 pest control, chemical control, *Borophus macropus* 6071
 pests, life cycle, *Haematopus tuberculatus* 6070
 skin diseases, incidence, treatment, Sudan 2923
 skin diseases, *Psoroptes*, Demodex 2932
- Domestication**, occurrence, apiculture hives, Canada, Saskatchewan 4603
- Dominance**, color, green, nymphs, *Leptoglossus corollae* 1789
 courtship, aggressive behavior, males, *Epicauta pennsylvanica* 4296
 orchards, *Aonidiella auranti* pest control effects on, *Formicidae* 2879
 queens, foundresses, colonization, *Polistes fuscatus* 1893
 social behavior, castes, colonies, *Bombus terrestris* 5419
 social hierarchies, olfactory stimuli role, *Nauphoeta cinerea* 8596
 social hierarchy, aggressive behavior, *Telegonus oceanicus* 4652
 social hierarchy, *Panochogaster nigrans* serrei 5111
- Dominican Republic**, fossils, amber, *Entomophthora* 5539
 fossils, morphology, taxonomy, *Trigona dominicana* 6335
 new records, taxonomy, *Centruroides* 8744
 new species, *Liparthrum hispaniolae*, *Ptychoporus antillensis* 806
- Dominance**, surveys, attraction, host plants, *Heliotropium*, Kenya 5962
- Donicotopus bicandatus**, new species, new genera, taxonomy, morphology, Canada, Northwest Territories 4826
- Donicotopus frontalis**, pest outbreaks, forests, climate effects on, statistical analysis 2961
- Dormancy**, ecological evaluation, population ecology, reviews, *Insecta* 7580
 ovary, overwintering, *Danaus plexippus* 3610
 seasonal variations, fat metabolism, body weight, environmental effects, *Scymnus lividigaster*, *Leptotheca garbula*, Australia 3327
- Doryctophila**, taxonomy, revision, *Cicadellidae*, Africa 829
- Dorylinae**, social behavior, foraging behavior, morphology, nests 5425
- Doryphora punctatissima**, life history, food plants, *Prestonia isthmica* 1982
- Doryctobates paradoxus**, infection, parasites, *Macracanthorhynchus hirudinaceus*, China, People's Rep., Liaoning Province 5289
- Doryctopus salicinus**, rare species, new records, British Isles, England, Cumbria 6298
- Dosage**, feeding methodology, *Apis mellifera* 66
 fumigants, chemical control, stored products pests, *Acaris* 1045
 pesticide applications, bioassays, *Choristoneura occidentalis* 4615
- Dosage composition**, autotomes, trsomy, enzymes, *Drosophila melanogaster* 8640
- Dose-response effects**, enzyme polymorphism, pesticide applications, larvae, *Choristoneura occidentalis* 4239
 phenothrin, *Aedes taeniorhynchus*, *Anopheles quadrimaculatus*, *Musca domestica*, *Stomoxys calcitrans* 1401
- Drainage systems**, storm water, breeding sites, *Culicidae*, USA, New Jersey 2918
- Drakensberginae**, taxonomy, revision, new families, *Cicadellidae*, Africa 829
- Drasodes clusi**, taxonomy, synonymy, *Zelotes javanus* 5548
- Drepanophium platanoideis**, prey, predation, oviposition, *Aphelinus thomsoni* 2887
- Drepanotermes**, taxonomic revision, morphology, ecological distribution, association, Australia 836
- Dreyfusia**, infection, role, dieback, population decline, *Abies alba*, Germany, Fed. Rep 8342
- Drift**, benthos, composition, environmental effects, Australia, A.C.T., Condor Creek 753
 diel activity, nymphs, *Atalaphaeboides*, Australia 754
 insecticides, aerosols, toxicity, *Glossina morsitans*, Botswana 1469
 pollution effects, insecticides, streams, *Insecta* 5437
 pollution effects, insecticides, streams, *Insecta* 7820
- Drinking behavior**, flight, *Tabanidae* 4360
 water intake, castes, *Macrotermes michaelsoni* 5918

- Drosophila**,
diploids, chromosomes, *Apis cerana japonica* 1546
fitness, inbreeding effects on, *Apis mellifera* carnica 4697.
- Drosophila erythrorhiza**,
nutrient levels, association, Arthropoda, Australia 7555.
- Drosophila mangiferae**,
pest control, barriers, alkathene bands, trees, *Mangifera indica* 7748.
pest control, barriers, trees, *Mangifera indica* 7754.
- Drosophila melanogaster**,
mutants, photoaxis, visual stimuli, courtship 4689.
- Drosophila**,
acetic acid, nutrient utilization, stress 8075.
alcohol dehydrogenase, aldehyde oxidase, activity, utilization, food sources 5695
alcohol dehydrogenase, stability, measuring techniques 182
antibodies effects on, embryo cells differentiation, lysis 368
blastoderm cells, embryogenesis 2670.
cell lines, cell adhesion induction, 20-hydroxyecdysone, juvenile hormones 8060
cell lines, ecdysteroids effects on cell membranes 5656
cell lines, ecdysterone stimulation, gene expression, heat shock proteins, cDNA, hybridization analysis 7835
cell lines, salivary gland, gene expression, heat shock proteins 8634
cell lines, 20-hydroxyecdysone effects on chemical composition 168
cells differentiation, gene regulation, loci 5445
central nervous system development, embryos, markers, immunohistochemistry 8913
chorion genes, organization, gene amplification, restriction endonuclease mapping 5454.
chromatin, nucleosomes organization 6245
x chromosome inversion effects on gene amplification 5469
circadian rhythms, oscillation, mathematical models 1741
comparison, rRNA 5S, nucleotide sequence, *Acyrtosiphon magnoliae* 4686
compartmentation, mutation, patterns duplication, mitosis recombination 1522
cytoplasmic streaming, follicles, oogenesis 7476
defective mutant, leg segments, neurons morphology 896
deficient mutant, embryogenesis, maternal effects 764
deficient mutant, sex chromosomes lesions, DNA repair 5474
development, genetic control, biometrics, wings 3503
development, labelling cells, gene expression, clones 757
dispersal, population dynamics, USA, North Carolina 3634
DNA, 5'-terminus, deoxyribonuclease I hypersensitivity sites identification, association Sgs4 gene 6250
DNA genomes organization, globin loci 7823
DNA, nucleotide sequence, restriction endonuclease, sex differences 3076
DNA polymorphism, restriction endonuclease 3062
ecdysteroid effects on protein biosynthesis, cell lines, gene expression 3336
ecdysteroids receptors, characterization 8359.
ecological distribution, altitude, annual cycles, population dynamics, Japan, Mt. Soranuma 4463.
eggs, cortex, receptors development, ovulation 1079
embryo cells, actin acetylation 184
embryogenesis, blastoderm determination, metameric pattern, reviews 4246
embryogenesis, cell division, blastoderm 3461
embryogenesis, imaginal discs differentiation, regulation 335
embryogenesis, tergites 5813
embryogenesis, wing discs, gap junctions communication 5100.
evolution, geographical distribution, population genetics, USA, Hawaii 5502.
evolution, structure, alcohol dehydrogenase 3334
feeding behavior, habitat, gut microflora, yeasts 5917
flight, motor activity, nerve transmission, interspike interval 7285
flight muscle, electrochemistry, potassium, mutation 5660
fluorouracil, 5-bromodeoxyuridine inhibition, mutants, gene expression 1528
food organisms, diets, effects on phenotypes, *Leptothorax* 3373
food organisms, growth, *Humbertiella similis* 7434
gene expression, heat shock, books 9504.
gene frequency, adaptiveness, isozymes 5451.
gene regulation, genomes, reviews 9380.
genes, DNA, transcription, RNA polymerase 1507.
genes, transcription 3061.
genetic control, alcohol metabolism, alcohol dehydrogenase 3909.
genetic variance, allozymes, heterozygosity 3920.
genetics, mutation, leg, morphology 766
genomes, transposing elements, genes, chromosomes 6237.
gonotaxis, phototaxis, vertical distribution 2750.
gonads differentiation, histology, immunofluorescence 1080.
heat shock genes, activation, transcription 1506.
heat shock genes, gene regulation 6246.
Heat shock, protein biosynthesis, mRNA translation 8932.
heterozygosity, enzymes, population genetics, geographical distribution 2349.
histone, gene mapping 3068
20-hydroxyecdysone effects on, cytology, cell lines, embryogenesis 5811
imaginal discs, transdetermination 338.
immunoglobulin heavy chains switch regions, cloning, cDNA nucleotide sequence 6251.
infestation, infants, sepsis, case reports 4500
juvenile hormones analogs effects on differentiation, cell lines 7328.
Kc cells, proteins, translocation, distribution, heat shock 7838.
Kc-H cells, sRNA characterization, comparison, Mammalia 7861.
larvae, nuclei RNA, DNA hybridization analysis 6240.
larvae wing discs, distribution, development 339.
learning behavior, population characteristics, memory 2764
lectins, chemoreceptors, cell aggregation 98.
life history, reproductive strategy, mathematical models 2785.
lindane isomers, toxicity 5040.
longevity, genetic factors, mutants 5057.
mate selection, behavioral genetics 6678.
mating behavior, deserts, role, visual stimuli, auditory stimuli 2737
mating behavior, fitness, breeding success 5059.
mating behavior, intensity, mathematical models 1144.
meiosis, centromeres anaphase effects on crossing-over 9402.
micromethods, injection, nuclei, eggs 8850.
migrations, deserts, population genetics, USA, California, Death Valley 6814.
morphogenesis, imaginal discs, mutation, patterns formation 762
muscles, thorax, cell lines, development, origin 5814.
mutagenicity testing, larvae 7041.
mutagens, sensitivity 7039.
mutants, antennae morphology, neurons 142.
- Drosophila**, (continued)
mutants, embryo cells, thorax ganglia, central nervous system 8648.
mutants, gene expression, development 8642.
mutants, mitochondria, calcium regulation 8646.
mutants, sexual behavior, courtship 4286
mutation, alleles, hybrids, mutagenesis 3103.
mutation, associative learning, habituation, sensitivity 8647.
mutation, duplication, genetic analysis 9414.
mutation, esc gene, gene expression, determination, segments 6253
neurons, thorax sensilla, anatomy, mutants 4962
nucleolus organizer region activity, gene regulation 8633.
nucleolus organizer region, chromosomes, activation 5452.
nucleotide sequence, genes, DNA, plasma proteins 3876.
nucleotide sequence homology, divergence, DNA hybridization 5453.
oviposition, substrate preferences, yeasts 9072.
phototaxis, photoreceptors pigmentation 2539.
phylogeny, breeding success, population genetics 6296.
polypeptides, histone H2b, characterization, heat shock, protein biosynthesis 7325.
polytene chromosomes, antigenic characteristics 3073.
population genetics, allozymes, polymorphism, Germany, Fed. Rep. 7061.
population genetics, interspecific hybridization, DNA reassociation 1557.
population studies, sigma virus infection 3393.
regeneration patterns, imaginal disc, genetics 4252.
ribonucleoproteins, UI RNA, protein composition, heat shock 8623.
ribosomal protein biosynthesis, protein biosynthesis, embryogenesis 1537.
ribosomal proteins genes, organization 9392.
rRNA Arg genes transcription initiation sites, characterization 9390.
sepiapterin biosynthesis, intermediates purification 8951.
sepiapterin, synthesis intermediates, purification, characterization 8947.
species, repeated sequence DNA, genetic variance 8639.
sympatric populations, niche pattern, speciation, food sources, Australia 5496.
taste perception, chemoreceptors, larvae 4141.
temperature-sensitive mutant, tetrodotoxin binding, sodium channels, axons 9415.
tissue culture, nerves, central nervous system 3281.
toxicity tests, topical application, hexachlorocyclohexane 5045.
transposons, DNA nucleotide sequence 4669.
Ultraschall mutations, Ubx gene, gene expression, thorax, abdomen 6272.
vitellogenesis, regulation, genetic factors, hormones 5095.
wing discs, cells, growth, competition 3468.
wing discs, cells, morphology, development, larvae 7429.
wing discs, differentiation, mitosis, compartmentation 1084.
wing discs, fragments, regeneration 3467.
wing discs regeneration sequence 3469.
yeasts, mutation, mutants, developmental genetics, genetics 1523.
- Drosophila acanthoptera**,
mating behavior, deserts, role, visual stimuli, auditory stimuli 2737.
- Drosophila affinis**,
ecological distribution, abundance, temperature, effects on productivity 4445.
- Drosophila aldrichi**,
attractancy, yeasts, developmental stages, niche pattern, feeding behavior 3303.
yeasts attractancy, genetic variance, feeding behavior, niche pattern 3268.
- Drosophila algonquin**,
ecological distribution, abundance, temperature, effects on productivity 4445.
population genetics, islands, USA, Maine Coast 9435.
- Drosophila areolaris**,
age effects on chromosomes recombination, males 5463.
intraspecific hybridization, heterosis, population genetics, India 3915.
mutation, suppressors, chromosomes, oocytes, spermatocytes 3098.
- Drosophila arizonensis**,
cistrons, ribosomes, salivary gland cells 5446.
courtship, reproductive isolation, *Drosophila mojavensis* 402.
feeding behavior, habitat, gut microflora, yeasts 5917.
genetic control, mating behavior, interspecific hybridization, *Drosophila mojavensis* 3108.
hybrids, heterochromatin, polytene chromosomes, *Drosophila mulleri* 5464.
polytene chromosomes, chromatin deletion, addition 5459.
- Drosophila affinis**,
ecological distribution, abundance, temperature, effects on productivity 4445.
- Drosophila bhagmandalensis**,
new species, taxonomy, morphology, India 7174.
- Drosophila bipunctata**,
antennal chemoreceptors, mating behavior, recognition, males 8251.
- Drosophila brahmagiriensis**,
new species, taxonomy, morphology, India 7174.
- Drosophila busckii**,
vectors, pathogens survival, *Erwinia carotovora* 1446.
- Drosophila buzzatii**,
alcohol dehydrogenase, genes duplication, population genetics 5491.
Drosophila aldrichi, attractancy, yeasts, developmental stages, niche pattern, feeding behavior 3303.
yeasts attractancy, genetic variance, feeding behavior, niche pattern 3268.
- Drosophila C virus**,
protein biosynthesis, cell culture, *Drosophila melanogaster* 1032.
- Drosophila dominici**,
new species, taxonomy, morphology, India, Darjeeling 8795.
- Drosophila fascipennis**,
new records, geographical distribution, India 7175.
- Drosophila fima**,
morphology, taxonomy, new species 1628.
speciation, association, Ficus, Africa 5964.
- Drosophila funebris**,
accessory gland, ultrastructure, proteins, secretions, characterization 8118.
hormones, amino acid sequence 969.
- Drosophila helvetica**,
population genetics, allozymes, polymorphism, Germany, Fed. Rep. 7061.
- Drosophila heterogaster**,
speciation, geographical distribution, behavior effects on 1562.
- Drosophila hydei**,
Y chromosome, DNA repeated sequence, hybridization analysis 9386.
Y chromosome, lampbrush, staining methodology 3894.
chromosomes banding, heterochromatin characterization 2317
fluorescence RNA, hybridization DNA 2304.
orientation, flight, visual stimuli 5864.
polytene chromosomes, banding patterns 7849.
puffing, salivary gland chromosomes, protein biosynthesis 5447.

Subject Index

Drosophila hydei, (continued)

RNA polymerase I, pupae, purification, characterization 8086
rRNA genes, nucleolus organizer region, introns characterization restriction
endonuclease mapping 4664
spermatogenesis, protein composition, Y chromosome mutants 2333
trimethylphosphate, effects on Y chromosome, spermatogenesis 2429
tyrosine aminotransferase, purification, characterization, antibodies production,
salivary gland 932

Drosophila immigrans,

breeding sites, fruits, interspecific relationships, Penicillium 6051
population genetics, reproductive isolation, Australia, Melbourne 5490

Drosophila latifasciiformis,

flight height, spatial distribution 8289.

Drosophila malerkotliana,

antenna chemoreceptors, mating behavior, recognition, males 8251

Drosophila mauritiana,

courtship, song, genetics 3536
hybridization, chromosomes crossing-over, gene expression, *Drosophila simulans*
8655

Drosophila megagenys,

feeding, Peritidion host plants, Australia 3590.

Drosophila melanogaster,

abdomen, segments, compartmentation, engrailed gene effects on 921.
absorption spectroscopy, polytene chromosomes 760.
accessory gland secretions, effects on oviposition, mating behavior 5858.
ADH genotype, heat shock stress, effects on ethanol tolerance 7859.
aflatoxins, effects on mortality, development, body length 5803.
age, cuticle growth 8018.
age effects, histones heterosis, hybrids 3453.
age, effects on protein biosynthesis, rRNA, aminoacylation 4235.
aging, cadmium effects on, temperature effects 1037.
aging, DNA fragmentation 4239.
alcohol dehydrogenase, enzymatic activity, allozymes, genotypes 5443.
alcohol dehydrogenase, genetic variance, biochemical characteristics, natural
selection 3910.
alcohol dehydrogenase, genotype-environment interactions, genetic variance 2298.
alcohol dehydrogenase, inhibition, mutants 7316.
alcohol dehydrogenase, substrate specificity 7315.
aldehyde oxidase activity, heterozygotes, ctn gene, developmental stages 7857.
alleles complementation dpp locus, polytene chromosomes, gene mapping 8635
 α -amanitin derivatives effects on RNA polymerase 8953.
analysis (RNA Val genes 3878.
aneuploidy patterns, mutagenicity testing 1526.
aneuploidy, sex chromosomes, sex ratio diversity 3119.
antennal sensilla, embryogenesis 6635.
avian sarcoma virus DNA genomes integration, eggs, embryos 9379.
avoidance learning, mutants 427.
bioassays, absorption, parasitism, host, crops 7747.
bioassays, phorbate degradation, soil, temperature 7402.
biochemical analysis, lipids, chromosomes, resistance, susceptibility, anesthesia
3447.
biological control, pathogens, *Bacillus thuringiensis* 2218.
biological control, predators food preferences, *Mariposa ygrina* 1208
cell culture, cricket paralysis virus proteins, purification, characterization
8991.
cell lines, β -N-acetylglucosaminidase secretion, enzymatic activity 96
cell lines, clones, immunology 2513.
cell lines, embryos, ecdysterone effects on cyclic AMP, cyclic GMP 2571
cell-free system, rRNA genes, cDNA transcription 8624.
X chromosome, lethality mutation, instability, alleles 3107
X chromosome mutation, markers, recombination frequency 3104
Y chromosome nucleolus organizer region mutants, analysis rRNA genes 5456
X chromosome recombination 7843.
X chromosome, recombination, variability, sex linkage, genetic variance 5461
X chromosome, sex ratio, population genetics 5499
X chromosome transcription, genes dosage, aneuploidy 2301.
Y chromosome, translocation, fertility 3089
Y chromosome, transmission, entire compound second chromosome, genetic analysis
9401

chromosome 3, banding, gene mapping 3070.
chromosome 3, mutants, hypersensitivity, methylmethanesulfonate, mustard 3097
chromosomes banding, characterization 3084.
chromosomes, bristles selection 1513.
chromosomes inversions, clones, population genetics, Australia 3113
chromosomes, lesions, males, mating, DNA repair, females 6264
chromosomes puffing, heat shock effects on 759
chromosomes, salivary gland, *sgs-6* localization 2307
chromosomes segments, cloning 4676
chromosomes transmission, population genetics, USA, Texas 3126
circadian rhythms, mutants, salivary gland cells fluorescence 4982
coleman ingestion, effects on polyploidy, aneuploidy, chromosomes nondysjunction
6263.
collagen gene, gene expression, DNA nucleotide sequence 8625
complex, purification, HnRNA 2308
compound eye mutants, locomotor activity, circadian rhythms 3304
courtship, song, genetics 3536
courtship, tracking, females 1140
cut locus, cloning, restriction endonuclease mapping 9383
cyclic AMP activity, regulation 8948
cycloheximide toxicity, developmental stages 8196
dark culture, effects on eye ultrastructure 131
dark tolerance, fecundity 8235
defective mutant, cells survival, ionizing radiation, ultraviolet radiation 3902
defective mutant, development, histology, ultrastructure 765
defective mutant, morphogenesis, melanoma, survival 1527
deficient mutant, gene expression, resistance, *Bacillus thuringiensis* 3879
deficient mutant, visual discrimination learning, memory 5122
deoxyribonuclease I, site location, chromatin, ribosomal proteins genes 1503
development, aging, effects on ethidium bromide 353.
development, alcohol dehydrogenase activity 7481
development, oxygen effects on, larvae 7453
developmental stages, mRNA, content 1493
developmental stages, pure culture, galactose enzymatic activity 165
diopoxy butane, mutagenesis, sensitivity 7040.
differentiation, histology, humerus imaginal discs 331
7,12-dimethylbenz(a)anthracene mutation, sex chromosomes 2332

Drosophila melanogaster, (continued)

dimethylnitrosamine demethylase activity 8944.
disease transmission, sigma virus 5034
dispersal, population dynamics, USA, North Carolina 3634.
DNA chromatin, binding, light 1510
DNA, clones, genetic analysis 1495
DNA nucleotide sequence, genes homology, transposition 1504
DNA nucleotide sequence, heat shock proteins genes 8631
DNA nucleotide sequence, transposons 1502.
DNA polymerase association DNA primase, embryos 9066
DNA polymorphism, restriction endonuclease 3062.
DNA primase priming activity, embryos 8626
DNA repair, deficient mutant, procabazine induction 2324.
DNA repair kinetics 7030
DNA repair, X radiation, recombination 3063
DNA replication, DNA polymerase I, termination 7831
ecdysone interaction, loci, chromosomes, salivary gland 2320
ecdysterone, effects on gene expression, LSP-2 gene, fat body 5482.
embryogenesis, defective mutant 1872
embryogenesis, egg shells ultrastructure 3510
embryology, differentiation, cuticle, tissues 1093
embryos, development, radiation, oxygen effects on 1120.
embryos, nuclei, high mobility group proteins, purification, characterization
7473
environmental factors, eggs production, iron radioisotopes 366
enzymatic activity, environmental effects, genetic factors, isochromosomes 2337
enzymatic activity, flight muscle, age effects 1755
enzymatic activity, genetic control, alcohol dehydrogenase, population genetics
2343.
enzymatic activity, superoxide dismutase, life span, correlation analysis 946.
enzymatic activity variability, genetic factors 3067
enzymes alleles, seminal fluid competition, sexual reproduction 2731.
enzymes, DNA transcription, histone acetyltransferase 5680.
enzymes, isolation, characterization, dihydroneopterin triphosphate cleavage 962
epistasis, effects on neosis, fitness 2318.
epistasis, inversion, fitness 2319
esterase 6, enzymatic activity, effects on reproductive behavior 1889.
ethylmethanesulfonate mutagenicity, radioresistance mutants 8650.
evolution, genes, nucleotide sequence 7879
eye color mutants mating behavior, pigmentation 1135
fecundity, population density effects on 2770
feeding behavior, habitat, gut microflora, yeasts 5917.
flight metabolism enzymes correlation energy output 2519
flight muscle, protein composition, myosin 1770
flight, visual perception motor activity neurophysiology 6683.
food organisms, RNA, hybridization DNA 2304
food organisms, carnivores, food availability, *Sarcocera purpurea* 1255
gene conversion, crossing-over, mutants 9384
gene expression, thorax development, bithorax genes 4674.
gene expression, yolk proteins, 20-hydroxyecdysone, effects on 6243.
gene libraries, histone H3 genes, insertion sequences insertions sites, cDNA
nucleotide sequence 8628
gene mapping, defective mutant, longevity 5450
gene mapping, deletion, mutants 9400
gene mapping, gene *Sussex*, chromosomes, temperature-sensitive mutant 7853
gene mapping, genomes, gene mapping 9395
gene mapping, immunofluorescence, polytene chromosomes 8632
gene mapping, RNA 1494
gene mapping, rRNA genes, heterochromatin, meiosis pairing, males 8636.
gene mapping, structure genes 7826
gene regulation, use cDNA probes 3886
genes, α -nubulin transcription, oogenesis, embryogenesis 6242.
genes, B104, characterization, DNA sequence, retroviruses 6241.
genes, courtship, mating behavior, hybrids, *Drosophila simulans* 3109.
genes, gene mapping, DNA 1500
genes, heat shock proteins, hybridization, localization 4672.
genes, polymorphism, structure variation, ribosomes, rRNA 5448.
genes, polymorphism, gene analysis, mapping 1498
genetic control, aldehyde oxidase, xanthine dehydrogenase activity, mal gene
7858.
genetic control development 5836
genetic factors effects on germ cells, developmental stages, radioresistance
2314
genetic variance, chromosomes segregation 9403.
genetic variance, enzyme polymorphism, alcohol dehydrogenase, environmental
effects 5492
genetic variance, selection, linkage, heritability 5441
genetics, courtship, mating behavior, eye color mutants 6276.
genetics, cuticle polarity, mutants 6271.
genetics, inbreeding, chromosomes, nondysjunction 6257
genetics, inbreeding, recombination 7032.
genomes, DNA clones, reviews 6248
genomes elimination, chromosomes, transmission (sexual) diversity 3064.
genotypes, adaptiveness, selection 1508
genotypes effects on egg production 7472.
geographical variations, enzymes activity, gene frequency 6283.
heat shock, dephosphorylation, ribosomal protein S6 7319.
heat shock genes, DNA nucleotide sequence, temperature effects on transcription
7834.
heat shock genes transcription, role RNA polymerase II 6274.
heat shock, induction, mRNA, cloning, characterization, genes 3877.
heat shock, protein biosynthesis, mRNA translation 5708
heat shock proteins, association chromatin, characterization 4158.
heat shock proteins, biosynthesis, developmental stages 5686.
hemolymph, blood cells, ultrastructure, phagocytosis 2542.
heterochromatin, chromosome aberrations, mitotic exchange 6256.
heterochromatin homology, meiosis segregation, autosomes, spermatogenesis 7848.
heterochromatin polymorphism, characterization 2327.
heterochromatin recombination, gametes 3071.
hybridization, DNA, genes, genetic analysis 3917
hydrocarbons, molting, sexual dimorphism 943.
20-hydroxyecdysone effects on sexual reproduction, fecundity 5820.
imaginal discs, differentiation 1081
imaginal discs, protein biosynthesis 3507
imaginal discs, transdetermination 338
immune response (cell-mediated), eggs, pathogens, *Asobara tabida* 1819.

Drosophila melanogaster, (continued)

immunoassays, RNA polymerase II 2586.
 immunology, antigens, antibodies, development 3502.
 inbreeding, nondysjunction, chromosomes, sex differences 4679.
 inbreeding, selection, effects on mating behavior 5485.
 isocitrate dehydrogenase (NADP⁺), tissues distribution, imaginal discs 392.
 isozymes, biochemical analysis, composition, peptide mapping 4670.
 karyotypes, paratoids host searching behavior optimization, *Asobara tabida* 7539.
 lactate dehydrogenase activity, ontogeny 8955.
 landing behavior, habituation, visual perception 1156.
 larvae, cells, growth, eye disc 3292.
 larvae development, enzymatic activity, genetic factors 1541.
 lethality, alleles, mutation, loci, mus-103, mus-109 8644.
 life history, genetic factors, temperature effects on gene expression 7059.
 life history, genetics 3117.
 life history, population dynamics, demography 7065.
 loci inversion, linkage disequilibrium, recombination 2313.
 malathion, pesticide resistance, selection 7868.
 males breeding success, genetic variance, fitness 3125.
 males recombination factors, characterization 2315.
 mass rearing, cages effects on development time 385.
 mating behavior, genes, lethality effects on 5484.
 media (culture) 7256.
 meiosis, chromosomes, microtubules 3893.
 meiosis, chromosomes orientation, organelles effects on 1519.
 metabolism, cyclic nucleotides, phosphodiesterases, enzymes, proteins, genetics, biochemical analysis 3912.
 metamorphosis, developmental stages 3460.
 methyl methanesulfonate, N-nitrosodimethylamine clastogenicity 9413.
 methylthioadenosine nucleoside phosphorylase, kinetics 179.
 mitochondria DNA, restriction endonuclease mapping 3875.
 mobility ribosomes (rDNA insertion sequences 3081).
 morphology, (follicles, temperature-sensitive mutant 3099).
 morphometry, heritability, age effects, crowding 2689.
 muscarine receptors, characterization 114.
 mutagenesis, genes, fertility, males, Spermatogenesis 763.
 mutagenicity testing, ethanol, enzymes 1525.
 mutagenicity testing, lethality, flavonols 5475.
 mutagenicity testing, nifurumol, pesticides 5476.
 mutants, synergism, mutagenesis 7043.
 mutants, enzymatic activity 1529.
 mutants, eye pigmentation, effects on phototaxis 3096.
 mutants, gene expression, heat shock proteins, loci 87A7 locus, 87C1 locus 8645.
 mutants, genes, recombination 7854.
 mutants, genetic control, morphogenesis 9416.
 mutants, intersexes, histology, reproductive organs, genitalia 5064.
 mutants, lethality, purines metabolism 3095.
 mutants, lethality, sex chromosomes 5473.
 mutants, loci, excision, DNA repair 5444.
 mutants, mosaics, morphology 1535.
 mutants, pleiotropics, gene expression, gene mapping 5472.
 mutants, sex determination, vitellogenesis, gonads, morphology 6268.
 mutants, sex pheromone, courtship inhibition 972.
 mutants, tumorigenesis, sterility 3093.
 mutation, DNA, isolation, methodology 1509.
 mutation, duplication patterns, thorax, imaginal discs 767.
 mutation, homoosis, wings, heterozygotes, homozygotes 3901.
 mutation, neutron radiation, X radiation 7038.
 mutation, photoreceptor, rhodopsin, proteins, opsin, vitamin A 1740.
 mutation, spermatogenesis, X radiation 3100.
 mutation, thiorax loci, alleles 8643.
 mutation, tryptophan metabolism, neurons 1534.
 mutation, X chromosome, gene mapping 1505.
 mycotoxins, effects on, viability, development, body length 4212.
 mutants, X radiation effects on transposons, spermatogenesis 2331.
 N-nitrosopiperidine induction chromosome aberrations, X chromosome, Y chromosome 9019.
 nondysjunction, chromosomes, cytoplasm, genetics effects on 4680.
 nondysjunction, genetics 3105.
 nondysjunction, genetics 3106.
 nuclear membranes, proteins, isolation, characterization, embryos 4283.
 nucleotide sequence, genes, yolk proteins, mRNA, eclyosis effects on transcription 4662.
 nucleotide sequence, heat shock proteins, genes 8629.
 nucleotide sequence, repeated sequence, DNA 7822.
 oocytes ultrastructure, juvenile hormones analogs effects on 1858.
 oogenesis, protein biosynthesis, site location, timing 394.
 oogenesis, vitellogenesis, temperature-sensitive mutant 2334.
 overwintering, effects on infection, sigma virus 4203.
 oviducts, growth inhibitors, plant extracts, coumarin, euponium, *Eupatorium japonicum* 6621.
 oviposition behavior, site selection 405.
 oviposition rhythms, acetic acid effects on 2749.
 oviposition rhythms, external stimuli, photoperiods 4262.
 oviposition site selection, food availability, yeasts, niche pattern 3530.
 palindromes, characterization, DNA 2338.
 parasites, attachment, gut, malpighian tubules, *Herpetomonas ampelophilae* 3408.
 parasitoids, diapause adaptations, geographical variations, *Leptophila* boudardi 6637.
 pesticide resistance genes, N-nitrosodimethylamine toxicity 7048.
 pPpd gene, Gpdp gene, genotypes correlation biochemical characteristics 4687.
 pH, apno 3457.
 phenotypes, lethality, notch gene 3101.
 phenotypes, morphology, selection 2341.
 picornavirus mutagenesis, gene expression, X chromosome 5471.
 pigments, biosynthesis, enzymatic activity, genetic control 3907.
 pigments, drosopterin, eye, biosynthesis, biochemical analysis 3325.
 pollution effects, mutagenicity testing, herbicides, fungicides, insecticides 4684.
 polyribosomes, mRNA, nucleotide sequence, homology, developmental stages 1539.
 polypeptide chromosomes, genes, structure 3065.
 population genetics, allozymes, stability, seasonal variations 3129.
 population genetics, enzymatic activity, alcohol dehydrogenase 1761.
 population genetics, enzymatic activity, polymorphism 1551.
 population genetics, fitness, polymorphism, environmental effects 1555.

Drosophila melanogaster, (continued)

population genetics, gene localization, protein composition 2350.
 population genetics, genetic variance Adh locus, restriction endonuclease mapping 9425.
 population genetics, genetic variance, peptide mapping, alcohol dehydrogenase, genes 7874.
 population genetics, multiple mating, sperm displacement, mathematical models 9431.
 population genetics, reproductive strategy, divergence, temperate environment, tropical environment 7057.
 population genetics, sex isolation, hybridization, sterility 6281.
 population growth, population density, fitness 2867.
 population levels, mass rearing, estimation methodology 2487.
 population stability, population genetics, selection 2864.
 population studies, cold tolerance, genetic drift 3926.
 position effects variegation relationship chromosomes structure, heat shock puffing 7840.
 protein biosynthesis, developmental stages, translation errors 1536.
 protein biosynthesis, salivary gland, development, larvae 8111.
 protein biosynthesis, vitellogenin, follicles, ovary 3506.
 protein biosynthesis, wing discs, defective mutant 3908.
 proteins, antibodies, biochemical analysis 3270.
 proteins, cuticle, gene expression, development 3911.
 purification, characterization, ribosomal proteins 8935.
 radiation damage, chromosomes, spermatogenesis, DNA repair, oocytes, mutants 6261.
 radiation resistance, genetic factors, caffeine effects on 7042.
 radioresistance, genetic factors, effects on oocytes, radiation 2346.
 radioresistance, populations, genetic factors, chromosomes 3 2345.
 radioresistance, mutants, X radiation, chromosome aberrations 8649.
 recessive mutation, effects on enzymes, mitochondria respiration 5479.
 reovirus, detection, characterization 1025.
 re(2)P locus, polymorphism, selection mechanisms 7867.
 repeated sequence, rRNA genes, evolution 8657.
 replication, chromosomes, transcription, rRNA repair 7037.
 reproduction fitness, temperature, carboxyl-ester hydrolase, alleles, males 7474.
 reproductive isolation, mate selection, evolution, speciation 3929.
 reproductive isolation, strains, competition, population density 1545.
 ribonucleoproteins, isolation, characterization 942.
 ribosomal proteins, characterization 3332.
 ribosomes, subunit structure, monomers 9385.
 RNA, nucleotide sequence, secondary structure, splicing 1499.
 RNA polymerase II, α -amanitin binding, thermal stability, kinetics, comparison mutants, association Rpl-C4 locus 7045.
 RNA polymerase II, amantin analogs inhibition 3074.
 rRNA, ribonucleoproteins structure, electron microscopy 7839.
 RNA biosynthesis, mutants 1538.
 RNA genes, tyrosine, localization, DNA 2303.
 rRNA Lys genes, DNA nucleotide sequence 9396.
 rRNA Lys, nucleotide sequence 9391.
 rRNA, nucleotide sequence, secondary structure modification, chloroacetaldehyde 4667.
 rRNA, rRNA 5S genes organization, chromosomes, hybridization analysis 6244.
 rRNA Val genes cDNA, cell-free system transcription 9389.
 rRNA Val genes, characterization, gene mapping, nucleotide sequence 4671.
 rRNA 5S genes, organization, insertion sequences 9397.
 k(i)u¹⁰⁹ temperature-sensitive mutant, gene expression, protein biosynthesis, chromosomes puffing 8641.
 salivary gland, chromosomes puffing, eclystosome, genetic control 7821.
 salivary gland chromosomes, puffing, heat shock 2310.
 satellite DNA, isolation, characterization 3058.
 segregation chromosomes, correlation, biological properties 3090.
 selection, fecundity, life history 3120.
 selection, strains, bristles morphology 1553.
 seminal fluid storage, females, esterase enzymatic activity 2716.
 sense organs, taste perception, mouthparts, ultrastructure 153.
 sex chromosomes, exchange, Y RNA genes, males 3895.
 sex chromosomes, genetic variance, cross-breeding, strains 7029.
 sex determination, gynandromorphs, temperature-sensitive mutant, loci, gene expression 7824.
 sexual reproduction, life span, physiology costs 5056.
 3gs-4, X chromosome, larvae, salivary gland, secretion 2311.
 sigma virus infection, effects on fecundity 3425.
 sigma virus infection, genetic analysis 8999.
 sister chromatid exchange, somatic cell, larvae 5442.
 spermatogenesis, deficient mutant 3903.
 spermatogenesis, chromosomes markers, neutron radiation, X radiation effects on 2312.
 sterility factors, resistance, genetic control 3121.
 sterility, hybridization, induces chromosomes 2326.
 sterility, mutants, characterization, RNA biosynthesis, ovary 1530.
 strains, amantin resistance genes, chromosome 3 9419.
 sulfite dehydrogenase, characterization 3314.
 synthetic chromosomes, characterization 3083.
 temperature effects on recombination variability 5449.
 temperature sensitive mutant, developmental genetics, RNA polymerase II 9418.
 temperature-sensitive mutant, genetics, development analysis 3102.
 temperature-sensitive mutant, morphology, wings, mortality 1533.
 temperature-sensitive mutant, shibire locus, gene conversion 9399.
 tissue culture, picornavirus infection, induction inhibition, heat shock proteins 982.
 tissues, differentiation, gene regulation, transcription 1498.
 toxicity, brocides, alkyl phenyl (dichloromethyl) phosphonates 1053.
 toxicity, phosphine, methyl borate 5031.
 toximul MP-8, mutagenicity testing, spermatogenesis 300.
 transmission, crop fields, *Erwinia carotovora* 3424.
 transposon mdg3 repeated sequence, DNA nucleotide sequence 9382.
 transposon 412 repeated sequence, DNA nucleotide sequence 9381.
 triethylurea, ethylmethanesulfonate effects on sex chromosomes breakage, spermatogenesis, storage females 1515.
 trisomy, autosomes dosage composition, enzymes 8640.
 tubulin gene expression, embryogenesis 3066.
 tyrosine-0-phosphate phosphatase, purification, characterization, larvae 8085.
 ultrastructure, cytochemistry, cells, hemolymph, hemopoietic system 6517.
 ultrastructure, cytochemistry, tumor cells, hemopoietic system, hemolymph, mutants 6516.
 vectors, pathogens survival, *Erwinia carotovora* 1446.

- Drosophila melanogaster**, (continued)
 visual discrimination, visual perception, locomotion, walking 906.
 visual perception, tracking, mating behavior 908.
 water loss heatability 7865.
 white locus, restriction endonuclease mapping 7836.
 wing discs, γ -radiation effects on 1106.
 wing discs regeneration, regulation 344.
 wings length selection effects on alleles loci 9378.
 wound healing, patterns regulation, imaginal discs, ultrastructure 341.
 x radiation mutation, sex linkage 6267.
 x radiation sensitivity, genes, lethality, mutation 7044.
 xanthine dehydrogenase, polymorphism, modification, loci 3069.
 yolk proteins, characterization, purification 5830.
 YPI gene, YPII gene, cDNA nucleotide sequence, comparison mRNA 5455.
- Drosophila mercatorum**,
 heterozygosity, polymorphism, enzymes, parthenogenesis, USA, Hawaii 3116.
 mating behavior, courtship, auditory perception 5852.
- Drosophila mercatorum pararepleta**,
 enzyme polymorphism, esterase, genetic factors 5481.
- Drosophila mettleri**,
 geotaxis, phototaxis, vertical distribution 2750.
 oviposition habitat preferences, effects on larvae survival 406.
 population studies, site selection, pupation, environmental factors 8375.
 tolerance, host plants alkaloids, ecological distribution, *Lophocereus schottii* 4389.
- Drosophila moana**,
 new species, morphology, taxonomy, Australia, Torres Strait 3953.
- Drosophila mojavensis**,
 courtship, reproductive isolation, *Drosophila arizonensis* 402.
 genetic control, mating behavior, interspecific hybridization, *Drosophila arizonensis* 3108.
 substrate preferences, enzyme polymorphism, esterase, loci, alleles 5477.
 substrate preferences, food preferences, foraging behavior, yeasts 4342.
- Drosophila montana**,
 population genetics, linkage disequilibrium, USA, Utah 1558.
- Drosophila mulieri**,
 cistrons, ribosomes, salivary gland cells 5446.
 hybrids, heterochromatin, polyene chromosomes, *Drosophila arizonensis* 5464.
 hybrids, nucleolus organizer region, activity, regulation 3059.
- Drosophila nanoptera**,
 mating behavior, deserts, role, visual stimuli, auditory stimuli 2737.
- Drosophila nasuta**,
 chromosomes, replication, heterochromatin, brain cells 4678.
 courtship, recognition, conspecifics, phylogeny 7490.
 salivary gland polyene chromosomes, replication 4677.
 sound production, variability, auditory communication 1164.
- Drosophila nasuta albomacana**,
 metaphase chromosomes, banding, heterochromatin distribution, comparison
Drosophila nasuta nasuta 6265.
- Drosophila nasuta nasuta**,
 metaphase chromosomes, banding, heterochromatin distribution, comparison
Drosophila nasuta albomacana 6265.
- Drosophila nasutoides**,
 satellite DNA, restriction endonuclease mapping 4665.
- Drosophila nebulosa**,
 flight height, spatial distribution 8289.
 polytene chromosomes, 2-propanol effects on staining, anisotropy 7844.
- Drosophila neokukui**,
 new species, taxonomy, morphology, India 7175.
- Drosophila nigromelanica**,
 imaginal discs, retermination 338.
 larvae development, enzymatic activity 2728.
- Drosophila nigrospiracula**,
 geotaxis, phototaxis, vertical distribution 2750.
 oviposition habitat preferences, effects on larvae survival 406.
 population studies, site selection, pupation, environmental factors 8375.
- Drosophila notha**,
 feeding, *Pteridium* host plants, Australia 3590.
- Drosophila obscura**,
 population genetics, allozymes, polymorphism, Germany, Fed Rep 7061.
- Drosophila polymorpha**,
 flight height, spatial distribution 8289.
- Drosophila primaeva**,
 courtship, mating behavior, population structure, population genetics, Hawaii 1554.
- Drosophila pseudoobscura**,
 age, cuticle growth 8018.
 alleles frequency, *moh* gene, *e-5* gene, neutral genes 4673.
 feeding behavior, habitat, gut microflora, yeasts 5917.
 females, copulation, sperm use 397.
 life history, breeding success, longevity 9086.
 males breeding success, genetic variance, fitness 3125.
 polymorphism, enzymes, population structure, geographical distribution 3127.
 sex ratio, population genetics, annual variations, abundance, USA, California 6290.
 statistical analysis, chromosomes, polymorphism, selection 3871.
- Drosophila pseudotakahashii**,
 phylogeny, allopatry, *Drosophila takahashii* 5503.
- Drosophila repleta**,
 chromosomes inversion, role speciation 8638.
- Drosophila silvestris**,
 morphometry, leg bristles, speciation, Hawaii 6294.
 population studies, geographical variations, sexual behavior, Hawaii 9067.
 speciation, geographical distribution, behavior effects on 1562.
- Drosophila simulans**,
 courtship, song, genetics 3536.
 dark tolerance, fecundity 8235.
 dispersal, population dynamics, USA, North Carolina 3634.
 DNA polymorphism, restriction endonuclease 3062.
 enzymatic activity, esterase, genetic variance, environmental factors 3114.
 genes, courtship, mating behavior, hybrids, *Drosophila melanogaster* 3109.
 gonads atrophy, hybrids, sterility 5067.
 heat shock genes, DNA nucleotide sequence, temperature effects on transcription 7834.
 hybridization, chromosomes crossing-over, gene expression, *Drosophila mauritiana*
- Drosophila simulans**, (continued)
 8655.
 satellite DNA, isolation, characterization 3058.
- Drosophila subobscura**,
 allozymes, genetic variance correlation linkage disequilibrium 7866.
 colonization, geographical distribution, population genetics, Chile 1578.
 genes, linkage disequilibrium, selection 1497.
 malate dehydrogenase enzyme polymorphism, relationship chromosomes polymorphism, linkage selection 9394.
 modification genes, mapping, chromosomes 3060.
 population genetics, allozymes, polymorphism, Germany, Fed Rep 7061.
 population genetics, genetic variance, allozymes polymorphism, geographical variations 3928.
 population genetics, mating, multiple insemination 3921.
- Drosophila subvittistris**,
 population genetics, allozymes, polymorphism, Germany, Fed Rep 7061.
- Drosophila takahashii**,
 phylogeny, allopatry, *Drosophila pseudotakahashii* 5503.
- Drosophila teissieri**,
 Males: morphology, genitalia, geographical variations, reproductive isolation, Guinea, Rnadesa 1552.
- Drosophila trapeziformis**,
 new records, geographical distribution, India 7175.
- Drosophila tristis**,
 population genetics, allozymes, polymorphism, Germany, Fed Rep 7061.
- Drosophila uniepectinata**,
 new records, geographical distribution, India 7175.
- Drosophila virilis**,
 DNA polymorphism, restriction endonuclease 3062.
 embryos, satellite DNA distribution, nuclei, nucleotide sequence 3874.
 enzymatic activity, amylase, gene regulation 5480.
 mitochondria DNA, restriction endonuclease mapping 3875.
 mutation: X chromosome, heterozygosity, enzymatic activity 1531.
- Drosophila willistoni**,
 population genetics, genetic load, Colombia 9429.
- Drosophila yakuba**,
 hemolymph, blood cells, ultrastructure, phagocytosis 2542.
- Drosophilidae**,
 association, galls, *Rudbeckia laciniata*, *Asphondylia belanthoglobulus* 6020.
 biogeography, ecological distribution, ecological genetics 7569.
 check lists, species composition, new species, new genera, taxonomy, morphology, zoogeography, Australia 8705.
 gene conversion 4399.
 gene expression 8955.
 pest control, Germany, Fed Rep 632.
 RNA polymerase, *Drosophila melanogaster* 8953.
 species composition, geographical distribution, Australia, Torres Strait 3953.
 taxonomy, surveys, India 784.
- Drosophila melanogaster**,
 cell culture, tissue culture, pathogens, *Drosophila C* virus, protein biosynthesis 1032.
- Drought**,
 effects on parasitism, Coniferales, Insecta, USA, California 4394.
- Drought tolerance**,
 osmoregulation, water balance, *Onymacris unguicularis* 8104.
- Drug effects**,
 cycloheximide, puromycin, avoidance learning, retention, *Periplaneta americana* 1548.
- Drugs**,
 distribution, colonies, chemotherapy, parasites, apiculture, *Apis mellifera* 8570.
- Drumming**,
 auditory communication, geographical variations, *Pteronarcia badia* 8269.
 auditory communication, *Plecoptera* 8268.
- Drunella doddsi**,
 sedimentation, ash, streams 6236.
- Drusilla**,
 surveys, geographical distribution, Mongolia, People's Rep 3934.
- Drusus kruusikii**,
 new species, Yugoslavia, Cma Gora 4066.
- Drusus noricus**,
 new species, taxonomy, morphology, Austria, Carinthia Mts 3235.
- Drusus sivechi**,
 new species, Yugoslavia, Cma Gora 4066.
- Dry weight**,
 adults, pupae, mathematical analysis, *Chortoneura fumiferana* 7260.
 life span, workers, *Apis mellifera* 8208.
- Dryas julia**,
 spermatophores nutritive value, selection pressure, comparison, *Heliconius charitonius* 773.
- Dryinidae**,
 oviposition, host specificity, *Dichoptera hyalunata*, *Eurybrachys tomentosa* 401.
- Drymonia dodonopsis**,
 new subspecies, taxonomy, morphology, USSR, Caucasus 4043.
- Drymus**,
 new records, Cuba 8732.
- Drymus armasi**,
 new species, taxonomy, morphology, Cuba 8732.
- Drymus spectabilis**,
 new species, taxonomy, morphology, Cuba 8732.
- Dryocetes confusus**,
 infestation, mortality, Coniferales, USA, Colorado 7551.
- Dryocossus kuriphilus**,
 parasitoids, autecology, methodology, weight, galls 7576.
 pests, biological control, parasitoids, *Torymus*, Japan 4545.
- Dryocytus**,
 new genera, Europe 4935.
- Dryodromia testacea**,
 new records, geographical distribution, Czechoslovakia 7901.
- Dryomyza descripta**,
 new records, geographical distribution, Czechoslovakia 3937.
- Dryomyzidae**,
 occurrence, geographical distribution, Czechoslovakia 3937.
- Dryopidae**,
 geographical distribution, world, surveys 5507.
- Dryopoidae**,
 geographical distribution, population density, zonation, USA, Virginia, Clinch

Dryopoides, (continued)

- R, USA, Virginia, North Fork Holston R 4658
- Dryops anglicanus**,
new records, geographical distribution, British Isles, Scotland, Lurgie L. 5508
- Ducts**,
salivary gland, fluids transport, *Aedes aegypti* 7362.
- Ducula chalconota**,
hosts, new species, *Duculacarus turgisetosus*, Indonesia 2387
- Duculacarus**,
new genera, taxonomy, morphology, Indonesia 2387.
- Duculacarus turgisetosus**,
new species, taxonomy, morphology, Indonesia 2387.
- Dudua adocima**,
new species, morphology, Madagascar 843
- Dufour's gland**,
chemical composition, volatiles, *Andrena*, North America 245
comparison, chemical content, defense secretions, *Atta sexdens* 254
defense secretions, chemical composition, volatiles, *Rhytidoponera metallica*, Australia 246
secretion, Hymenoptera, chemical analysis 988
secretion, volatiles, biochemical analysis, cells, *Colletes*, *Andrena*, *Lasiosomus*, *Trachusa byssina* 244
secretions, biochemical analysis, taxonomy, *Halictinae* 3384
secretions, larvae development, *Paraschnogaster mellyi* 3551
sex pheromone biosynthesis, *Brachymeria lasus*, *Brachymeria intermedia* 2754
trap pheromone, identification, *Solenopsis invicta* 2597
- Dugesia tigrina**,
biological control, pools, *Culicidae*, USA, North Carolina 2927
- Dunes**,
burrowing behavior, nesting behavior, *Colletes davesanus*, Germany, Fed. Rep. 7804
coastal zone, geographical distribution, population structure, *Odonata*, Australia, Queensland 4457
environmental effects, brackish water, survival, *Myrmica rubra*, *Myrmica scabrinodis*, *Lasius flavus*, *Lasius niger* 4455
habitat, ecological distribution, life cycle, *Psammodes porcellus*, France Coast 5982
habitat, host plants, population dynamics, *Brachycerus spinicollis*, Egypt 7591
physical activity, seasonal variations, *Brachytrypus megalcephalus*, Sicily 4324
synecology, community composition, *Coleoptera*, Namibia, Namib Desert, Gobabeb 9205
- Dung**,
coprophagous organisms, environmental impact, forage production, *Geotrupes*, *Cynodon dactylon* 1252
dispersal, population density, reproduction, *Onthophagus binodis* 7609
guilds, resource utilization, coexistence, *Aphodius* 9211
pasture, recycling, economic importance, introduced species, *Geotrupes*, USA 4654
utilization, forests, *Uroxya gorgon*, *Notobia panlis*, Panama 8370
- Duplication**,
genes, alcohol dehydrogenase, *Drosophila buzzatii* 5491
mutation, genetic analysis, *Drosophila* 9414
nucleotide sequence, DNA, *Bombyx mori* 4661
patterns, mutation, thorax, imaginal discs, *Drosophila melanogaster* 767
- Duration**,
copulation, males, γ -radiation effects on, *Lymantria dispar* 373
developmental stages, life history, algorithms, *Insecta* 5628
instars, food quality, *Dicranotropis hamata*, *Elymana sulphurella*, *Eucelis incus*, *Zygindia scutellaris* 3547
life span, dispersal, adults, *Pieris rapae crucivora* 4325
- Dursban**,
pesticides, chemical control, toxicity, *Aedes aegypti*, *Culex pipiens* 1832.
- Dust**,
silica, pest control, *Ceratophyllus fasciatus* 9255.
- Dutch elm disease**,
biological control, *Scolytus multistriatus* vectors, *Ceratocystis ulmi*, *Pseudomonas syringae* pathogens 4526.
- Duvallus carandii**,
larvae, morphology 1711.
- Dwarfism**,
morphology, *Anthocharis cardamines* 8881
- Dyes**,
marking, *Culicoides varipennis* 853.
- Dysaphis tharawal**,
new species, taxonomy, morphology, Nepal 7199.
- Dysdaemonia boreas**,
life cycle, morphology, immature stages, Brazil 6484.
- Dysdera concinna**,
morphology, taxonomy, adults 6504.
- Dysdercus cingulatus**,
chemosterilization, pest control 7451.
development, reproduction, *Polyscias guilfoylei* extracts effects on, biochemical characteristics 6650.
ovary, maturation, corpora allata activity 9060.
ovary, testes, cytology, degeneration, tepa 2694.
pathogenicity, *Paciomyces farinosus* 1001.
proccene II, starvation, corpora allata activity 9052.
reproductive organs, cytology, chemosterilants effects on, tepa 5085.
- Dysdercus clathratus**,
new records, pest outbreaks, India, Meghalaya 7691.
- Dysdercus fasciatus**,
accessory gland, ultrastructure, cytology 3454.
- Dysdercus koenigii**,
oviposition, neuroendocrine system, temperature effects 4260.
pest control, predators, *Hemipteroseius* insects 2972.
proteins, diets, hemolymph, ovaries 7480.
repellents, pest control 7340.
trehalase activity, development, reproduction 8941.
- Dysididae**,
predators, biological control, vectors, disease transmission 2861.
- Dysmesa**,
morphology, taxonomy, synonymy, *Brachygeophilus* 3236:
- Dysodia sica**,
life history, developmental stages, Panama 1986.
- Dysphagia**,
man, venom, stings, *Vespidae* 8177.

Dytiscidae,

- coexistence, pools habitat, streams, *Culicidae*, USA, Arizona, Dry Creek 9372.
heavy metals, bioaccumulation: sex differences, rivers, USSR 5436.
new species, new genera, identification keys, aquatic animals, Brazil 809.
- Dytiscus verticalis**,
burrowing behavior, larvae, pupation, pupae morphology 5155.
predators, avoidance behavior, secretions, *Notophthalmus viridescens* 3863.
- (E,E)-8,10-Dodecadien-1-yl acetate,
synthetic sex pheromone, pest control, dose, *Cydia nigricana* 696
- (E,E)-8,10-Dodecadien-1-ol acetate,
attractants, pest control, efficacy, *Melissopus latiferrans* 740.
- (E,Z)-3,13-Octadecadien-1-ol acetate,
attractants, pheromone traps, efficacy, *Synanthedon pictipes* 2230.
- Eadia brevivhamata**,
parasites, morphology, *Talpa europaea* 796.
- Eadia neurotrichus**,
new species, parasites, *Neurotrichus gibbsii* 796.
- Ear**,
auditory perception, mechanical properties, tympanum, acoustic trachea, *Tettigoniidae*, *Gryllidae* 4977.
auditory perception, mechanical properties, tympanum, *Noctuidae*, *Acrididae* 4976.
ectoparasites, goats, *Railletia manfredi*, *Psoroptes cuniculi*, Australia 650.
neurons, anatomy, *Agrotis segetum* 5662.
ultrastructure, *Hemideina crassidens* 138.
- Ear tags**,
cattle, insecticides, chemical control, *Musca autumnalis*, *Haematobia irritans* 9257.
- Earias**,
allium, pest control, India 7701.
chemical control, insecticides, cypermethrin, *Gossypium* 5389.
disease transmission, feeding, pathogens, *Xanthomonas malvacearum* 7380.
pest resistance, host plants, *Gossypium arboreum* 8441.
pests, control programs, population dynamics, parasites, *Gossypium hirsutum* 1444.
- Earias biplaga**,
infection, pathology, cytoplasmic polyhedrosis virus 3419.
- Earias fabia**,
embryogenesis, juvenoids effects on 5828.
- Earias insulana**,
pest control, chemical control, fenvalerate 5326.
pests, abundance, fertilizer application effects on, *Gossypium* 6973.
reproductive status, sex ratio, Israel 9175.
sex pheromone, pheromone traps, control programs 2078.
- Earias vittella**,
activity pattern, diel variations, India 9100.
antibiotics, *Gossypium* extracts, effects on development 6146.
development, host plants, varieties, pests, *Gossypium* 7791.
olfactory preferences, host plants genotypes, *Gossypium* 9080.
pest control, *Bacillus thuringiensis* 1836.
pest control, chemical control, fenvalerate 5326.
pest control, crop protection, economics, *Gossypium*, Sri Lanka 6110.
reproduction, *Blumes eriantha* oil vapors effects on 7454.
- Earonymia grusia**,
pests, development, larvae, damage, *Abies alba*, Romania 6920.
- Earonymia impossibilis**,
pests, development, larvae, damage, *Abies alba*, Romania 6920.
- Earias insulana**,
pests, infestation, agricultural practices effects on, *Gossypium* 6972.
- East Africa**,
taxonomy, morphology, *Philotarsidae* 4063.
- East Asia**,
Neocnemaspis, taxonomy, new genera, morphology, geographical distribution 1643.
- East coast fever**,
vectors, infection, *Theileria parva*, *Rhicephalus appendiculatus* 2181.
- Eboria plana**,
taxonomy, systematics, new genera, *Esiella* 2434.
- Eboria**,
species composition, USSR, Siberia 7106.
- Eboria holmi**,
new species, taxonomy, morphology, USSR, Siberia 7106.
- Ecdynurus samalorum**,
new species, taxonomy, morphology, Czechoslovakia 8798.
- Ecdynurus**,
life history, sexual reproduction, British Isles, England, Lume R. 3851.
- Ecdynurus fasciculatus**,
new records, ecological distribution, Czechoslovakia, Latorica R. 2355.
- Ecdynurus grandis**,
taxonomy, nomenclature, Italy 3145.
- Ecdynurus gridelli**,
taxonomy, nomenclature, Italy 3145.
- Ecdynurus lateralis**,
taxonomy, nomenclature, Italy 3145.
- Ecdynurus macani**,
new records, geographical distribution, larvae morphology, Czechoslovakia 777.
- Ecdynurus resali**,
new species, taxonomy, morphology, Turkey, Iran 4006.
- Ecdynurus venosus**,
functional morphology, laser doppler anemometry, water currents, streams, benthos 7026.
- Ecdysone**,
effects on carbohydrate composition, larvae, *Chilo suppressalis* 199.
effects on reproduction, development, *Glossina morsitans* 355.
effects on salivary gland secretion, proteins, *Manduca sexta* 2610.
effects on spermatogenesis, diapause, *Laspeyresia pomonella* 5831
effects on transcription, genes, yolk proteins, *Drosophila melanogaster* 4662
interaction, loci, chromosomes, salivary gland, *Drosophila melanogaster* 2320.
metabolism, reviews, *Insecta* 6574.
metabolism, *Triatoma infestans* 3322.
release, prothoracic gland, circadian rhythms, *Samia cynthia ricini* 8980.
role, vitellogenesis, *Culicidae* 3499.
synthesis, neurosecretion cells, assays, *Manduca sexta* 3343.
- β -Ecdysone,
diapause, activation, *Calliphora vicina* 6639.

Ecdysteroids,

- diapause, development, *Heliothis virescens* 7437.
 diets, effects on development, *Musca domestica* 7463
 effects on cell membranes, cell lines, *Drosophila* 566.
 effects on molting, larvae, *Bombyx mori* 2722
 effects on protein biosynthesis, gene expression, cell lines, *Drosophila* 3336.
 embryogenesis levels, *Schistocerca gregaria* 7331
 hormones, hemolymph, molting, instars, *Mamestra brassicae* 7327
 immunosorption, purification, methodology, *Insecta* 58
 levels, adults, *Gryllus bimaculatus* 8093
 metabolism, regulation, *Insecta* 3344
 ovaries, development, endocrine system, *Bombyx mori* 4162
 synthesis, metabolism, embryogenesis, *Locusta migratoria* 3345

Ecdysteroid receptors,

characterization, *Drosophila* 8959

Ecdysterone,

- effects on cyclic AMP, cyclic GMP, cell lines, embryos, *Drosophila melanogaster*
 effects on gene expression, LSP-2 gene, fat body, *Drosophila melanogaster* 5482.
 effects on reproduction, development, *Glossina morsitans* 355.
 genetic control chromosomes puffing, salivary gland, *Drosophila melanogaster* 7821.
 stimulation, gene expression, heat shock proteins, cDNA, hybridization analysis, cell lines, *Drosophila* 7835.

Echinoidae,

ectoparasites, *Mus musculus* 513.

Echinodermata,

parasites, feral populations, *Felis* 511.

Echinacea pallida,

host plants, oviposition, reproductive behavior, *Hesperia ottoe* 8246.

Echinothrips,

morphology, males 1718.

Echolocation,

predators, auditory perception, acoustic responses evolution, *Chiroptera*, *Lepidoptera* 5158.
 predators, auditory perception, tympanum, acoustic responses, *Chiroptera*, *Lepidoptera* 4975

Ecklon burchelli,

colonies, sampling methodology 5613.

Ectonineae,

reviews, check lists, species composition, keys, geographical distribution, Mexico 9500
 species composition, geographical distribution, keys, Mexico 6325.

Ecklonia maxima,

association, beaches, *Diptera*, *Coleoptera*, *Amphipoda* 541.

Ecdysis hormone,

role, molting, activity patterns, *Manduca sexta* 7431.

Ecological distribution,

- abundance, *Aedes*, *Nigeria* 2150.
 abundance, endangered species, *Anthocharis cethura catalina*, USA, California, Catalina I, 2105.
 abundance, forests, *Isoptera*, *Nigeria* 4460.
 abundance, leaf litter, *Epiperipatus isthmicola*, Costa Rica 7578.
 abundance, polymorphism, salt marshes, *Delphacidae*, USA, Florida 6833.
 adaptations, intertidal environment, *Aepus marinus*, *Aepus robbi*, British Isles Coast 5230
 altitude, *Drosophila*, Japan, Mt. Soranuma 4463.
 altitude, parasitoids, *Coleophora alpicolella*, *Gonotypus melanostoma*, *Scambus brevicornis*, *Tetrastichus endemus* 4371.
 association, fungi, *Insecta* 6038
 beetles, Chironomidae, Sweden, Laitinjauure L, 7020
 biotypes, population dynamics, companion, *Simulium*, USA, California 3866
 bogs, *Lepidoptera*, Switzerland 6874
Bombus, Iceland 786.
 community composition, biogeography, *Acridioidea*, China, People's Rep 4450
 community composition, *Leccium scabrum* host plants, *Mycetophilidae* 4439
 diets, life cycle, *Colias alexandra*, USA, Rocky Mts 7517
 disease transmission, African trypanosomiasis, *Glossina palpalis*, *Glossina tachinoides*, Africa, West 1343
 ecological genetics, biogeography, *Drosophila* 7569
 ectoparasites, *Tetranychidae*, *Prunus amygdalus*, USA, California 1391
 edge effect, *Schizocosa ocreata* 1936
 effects on population density, larvae development, *Hemileuca olivae* 604
 effects on pupae susceptibility, parasitism, *Neoleptocera carposcapae*, *Lepidoptera* 287
 environmental effects, mortality, *Oulema melanopus* 1112
 environmental effects, shores, *Ephyridae* 622
 food preferences, habitat preferences, association, *Drepanotermes*, Australia 836
 geographical distribution, colonies, *Solenopsis*, USA, Texas 6995
 geographical distribution, host plants, *Cerambycidae*, USA, Texas 1944
 geographical distribution, *Miniki mexicanum*, USA 2368
 geographical distribution, morphology, new species, *Dacus opitiae*, Australia 821
 habitat, agricultural land, *Lepidosaphes beekii*, New Caledonia 4429
 habitat, Belgium, *Araneae* 7582
 habitat, *Bifiditermes*, Africa 5520
 habitat, colonies, *Phedole lamia*, USA, Texas 6986
 habitat, environmental conditions, *Agnus arvensis*, Costa Rica 7598
 habitat, feeding, *Tityus trivittatus fasciatus*, Brazil 6838
 habitat, life cycle, dunes, *Psammopus porvicolis*, France Coast 5982
 habitat, life history, *Spanglerogryus albivittus*, USA, Alabama 5139
 habitat preferences, larvae, *Culex*, USA, Ohio 1951
 habitat selection, feeding behavior, *Acan*, Netherlands, Maarsseveen I L, 5433
 habitat, urban environments, *Hyalophora cecropia*, USA, Illinois 7597
 herbivores, host plants, reviews, *Xanthium spinosum*, *Xanthium strumarium*, *Insecta*, World 8357.
 host plants alkaloids, tolerance, *Drosophila mettleri*, *Lophocereus schottii* 4389
 host plants, roots, *Aphididae*, India 5258
 hydrology, environmental conditions, *Chaoborus*, Tasmania, Fidler L, 6225
 larvae, *Aedes*, Canada, Quebec, La Grande R, 567
 life cycle, *Ips tyrophilus*, *Ips amitus*, *Ptyogenes chalcographus* 6715
 life history, *Seymouria lividigaster*, *Leptothorax galbula*, Australia 2874
 morphology, taxonomy, *Drosophila fima* 1628
 nesting behavior, habitat, *Mischocyttarus* 5991
 nests, shade effects on, *Cataulacus guineensis*, Ghana 578
 new species, *Ceratonotus*, South America 1646
 new species, *Himalotrechodes insignis*, Nepal 17

Ecological distribution, (continued)

- new species, *Ixodes matoji*, Zimbabwe 12.
 nymphs, rare species, *Ledina tumana* 42
 parasites, *Ixodes matoji*, Mammalia, Zimbabwe 519
 parasitoids, grasslands, *Aphidius*, British Isles 8393
 pests, *Oryza sativa*, *Nephotettix cinctipes*, Japan 2142.
 plant communities, environmental impact, herbivores, *Gutierrezia sarothrae*, *Maehartheria canescens*, USA, New Mexico 2063
 population density, disease transmission, African trypanosomiasis, *Glossina palpalis* palpalis, Ivory Coast 1342
 population dynamics, *Haemaphysalis japonica* 9189
 population genetics, sympatric populations, *Aedes*, Kenya 2868.
 predatory behavior types, feeding adaptations, *Carabidae*, Italy 4446
 races, *Apis mellifera*, Oman 5216
 river basins, *Anopheles messeae*, Yugoslavia 670
 saline environments, effects on magnesium sulfate tolerance, *Aedes taeniorhynchus*, *Aedes dorsalis* 8101
 salt marshes, inland water environment, *Culicidae*, USA, Virginia 8610
 sexual behavior, *Agapetes galathea* 7605.
 soil, conferences *Arthropoda* 5541
 soil fauna, overwintering, *Thysanoptera*, USA, Illinois 9367.
 species composition, agricultural land, *Carabidae*, Belgium 9324.
 species composition, bark, *Araneae*, Europe 9177
 species composition, pests, *Scolytidae*, *Phytodidae*, South America 7722.
 species composition, sewage effluents, dams effects on, *Plecoptera*, Canada, Alberta, Bow R, 8608.
 species diversity, abundance, *Diptera*, Canada, Ontario, Salem Creek 3856.
 streams, identification, morphology, *Oecetes disjuncta*, *Oecetes avara* 8004.
 substrate preferences, larvae, *Chironomidae*, Yugoslavia, Pek R., 566.
 surveys, *Lepidoptera*, Spain, Huesca Province 3139
 temperature, effects on productivity, *Drosophila affinis*, *Drosophila algonquin*, *Drosophila athabasca* 4445
Trypanosoma infection, *Glossina longipennis*, Kenya 3676
 winter, Hemiptera, USA, South Carolina 455
 zooplankton, predation effects on, *Chaoborus americanus* 583
- Ecological evaluation,**
 dormancy, population ecology, reviews, *Insecta* 7580
 evolution, association, symbiosis, reviews, *Asigmat* 6295
- Ecological genetics,**
 ecological distribution, biogeography, *Drosophilidae* 7569
- Ecology,**
 biogeography, *Lepidoptera*, USA, California, Trinity Alps 7122.
 colonies size, survival, mortality factors, eggs, larvae, *Neodiprion sertifer* 1270
Dacus opitiae, Australia 3626
 entomofauna, check lists, British Isles 3137
 ethology, *Coniopteryx esbenpeterseni*, Italy 2813
 evolution, aquatic animals, water temperature, reviews, *Insecta* 6235
 feeding, food preferences algae, *Scutella pica* 3869
 geographical distribution, *Euchorthippus*, France 9108
 geographical distribution, habitat, *paraleucopsis mexicana*, Mexico, Sonora, Kino Bay 2884
 geographical distribution, new species, *Cricotopus zavrel* 2424
 habitat comparison, webs, *Araneida*, Costa Rica 1272.
 habitat, forests, *Coleoptera*, Sweden, Abisko 4424.
 larvae, *Empididae*, *Dolichopodidae*, Germany, Fed. Rep. 3865
 larvae, morphology, *Anopheles maculipennis*, France, Lyon 1571.
 life cycle, biology, *Phenacoccus maniboo*, South America 440.
 life cycle, pests, *cuneis* 1354
 life history, aquatic animals, *Baetisca bernei*, USA, West Virginia, Mingo Co. 2292.
 life history, oviposition, *Platymyrmex bilineatus*, host selection, *Metrosideros collina* population, stress, USA, Hawaii 1961
Neoneura waltheri, Argentina 3260
 parasites, 33 species, *Ixodoidea*, Ethiopia 1309.
 pathogens, *Entomophthoraceae*, *Aphididae*, France 2622
 vectors, *Dermacentor andersoni*, *Rodentia*, USA 637
- Economic analysis,**
 apiculture, methodology, environmental factors, USA, Alaska 1409
 apiculture, methodology, Jordan 1414
 apiculture, orchards pollination, *Apis mellifera* 1408.
 apiculture, pests, environmental factors, *Apis*, Bangladesh 1411.
 damage, crop production, *Curculio caryae*, *Carya* cane 2265.
- Economic importance,**
 bonomies, *Saxetia hemisphaerica*, Cuba 9095
 crop production, pollination, *Frankliniella insularis*, *Cajanus cajan*, Trinidad 737.
 pasture, recycling, dung, introduced species, *Geotrupes*, USA 4654.
 pest outbreaks, climate, mathematical models, *Agrostis* genus, Denmark 5412.
 pests, *Ascia monuste*, *Plutella xilostella*, *Pieris arpis*, Venezuela 2777.
 pests, effects on cattle, reviews, *Haemaphysalis irritans*, USA 5279.
 pests, silviculture, *Pinus resinosa*, *Neodiprion lecontei*, USA 5413.
 stings, man, *Solenopsis* 6893
- Economics,**
 apiculture, Brazil 4540
 apiculture, honey production, Japan 7721
 apiculture, pests, *Ursus americanus*, USA, Florida 6090
 damage, control programs, tropical environment, *Insecta* 2967.
 damage, crop fields, *Bemisia tabaci*, *Trialetodes abutonea*, *Aleyrodes spruceoides*, USA, California 9290
 hives damage, apiculture, predation, *Ursus americanus* 3040
 insecticides encapsulation, environmental impact, apiculture 7684
 integrated control, crop protection, insecticides, *Oryza sativa*, Philippines 5191
 market research, apiculture, pollen 2968
 pest control, chemical control, *Nilaparvata lugens* 4590
 pest control, crop protection, *Gossypium*, *Heliothis armigera*, *Earias vittella*, *Pectinophora gossypiella*, Sri Lanka 6110.
 pest control, insecticides, traps, *Glossinidae*, Ivory Coast 4549.
 pest control, integrated control, environment management, *Insecta* 3711.
 pest control, *Phyllotreta*, *Brassica campestris* crop fields, Canada 8534.
 pests infestation effects on yield, *Agromyza frontella*, *Medicago sativa*, USA, Vermont 8563
 production, apiculture, USSR 2996
 status, identification, taxonomy, *Insecta*, Africa 3176

- Ecophysiology**, adaptations, *Leptinotarsa decemlineata* 7608.
deserts, temperature effects on oxygen consumption, *Arthropoda*, *Insecta* 5710
diel activity, melanism, absorption, solar radiation, *Colias* 6536.
hemocytes, physical characteristics, *Noctuidae* 6543.
nutrient cycles, forests, phytophagous *Insecta* 7593
thermoregulation, cuticle, blood flow, *Sarcophaga* 6580.
- Ecopis heterodon**, new species, morphology, Madagascar 843
- Ecopsidondosa**, new species, morphology, Madagascar 843.
- Ecosystem analysis**, agricultural ecosystems, pest control, reviews, *Insecta* 6208
rangelands, pest control, reviews, *Insecta* 6212
- Ecosystem dynamics**, filter feeders, *Insecta* 477.
streams, pollution effects, insecticides, abundance, organic matter, *Insecta* 7820.
toxicity tests, indicator species, soil fauna, *Collembola*, *Coleoptera*, *Diptera* 5761.
- Ectasotoma tiaratum**, carotenoids, metabolism, β - ϵ -caroten-2-ol, β - ϵ -caroten-2-one 172
- Ectemnius centralis**, nesting behavior, nest provisioning 6676.
- Ectobius sylvestris**, taxonomy, keys, morphology, geographical distribution, new records, USA, New York 3471.
- Ectoparasites**, chemical control applications, fate, poultry, *Ornithonyssus sylviarum* 1387.
control, resistance, cattle hybridization, *Haemaphysalis longicornis* 649.
geographical distribution, new records, birds, *Arthropoda*, USA, Alaska 520
goats, *Raillietia manfredi*, *Phoropotes cuniculi*, Australia 650
hops, *Prochlorus fraxinifolia*, *Fraxinus*, USA, Iowa 39
life history, *Fionnia externa*, *Tsuga canadensis*, USA, Pennsylvania 437
population regulation, *Aphis nem*, *Nerum olender*, USA, California 1276
poultry, chemical control, food additives, *Ornithonyssus sylviarum* 1397.
surveys, *Acarales*, *Mus musculus* 513
surveys, *Arthropoda*, *Pediceptes phasianellus*, Canada, Manitoba 1230
surveys, *Tetranychidae*, *Prunus amygdalus*, USA, California 1391
transmission, domestic animals, *Phoropotes ovis*, *Ovis canadensis* 651
- Ectopirya leechi**, new species, taxonomy, morphology, USA 4788
- Ectrepesthoneura**, keys, geographical distribution, Palaearctic 811
- Ectymachus nepalensis**, new species, taxonomy, morphology, Nepal 7169
- Ecuador**, mutualism, *Cecropia monostachya*, *Formicidae* 5208
new genera, new species, taxonomy, morphology, *Carcinophoridae* 5563
new records, geographical distribution, *Heteromurus strebeli* 3988
new species, taxonomy, morphology, *Hesychotrypa punctata* 8758
new species, taxonomy, morphology, *Loxus asperus* 7985
new species, taxonomy, morphology, *Napodytes boki* 6355
new species, taxonomy, morphology, *Neasterocoris spangleri* 6415
new species, taxonomy, morphology, *Pagelmis amazonica* 4790
new species, taxonomy, morphology, *Penthemis palata* 6451
new species, taxonomy, morphology, *Trichaelura* 5611.
new species, taxonomy, morphology, 11 species, *Seydmatienides* 7936.
- Edema**, lean case reports, stings, *Buthus* 9256.
- Edge effect**, ecological distribution, *Schizocosa ocreata* 1936
oviposition, host searching behavior, *Anthochares cardamines* 4290
- Edovum putiferi**, new genera, new species, taxonomy, morphology, parasites, eggs, *Leptinotarsa* 521
Scuticimacina, Colombia 2454.
- Education**, role, wildlife conservation, *Lycena heteronea clara*, USA, California 2112.
wildlife conservation, endangered species, *Leptodactylus*, British Isles 2123.
- Edwardsia confusa**, new species, morphology (organisms), Australia, New South Wales 3193.
- Edwardsia spinosa**, geographical distribution, Australia, New South Wales 3193.
- Edwardsia tasmaniensis**, geographical distribution, Tasmania 3193.
- Edwardsites elongatus**, life history, population dynamics 5883.
- Egg laying**, *Copodisca kalmiella*, mortality, leaf area reduction, *Chamaedaphne calyculata* 530.
effects on trichomes, *Triticum aestivum*, *Oulema melanopus* 9328.
egg production, apiculture, *Apis cerana* 1145
environmental conditions, pests, *Dichocrocis punctiferalis* 6924.
host plants, chemical perception, *Acrolepiopsis assectella* 1158.
host searching behavior, population density, hosts, *Neodiprion sertifer*,
Lophytropicus luvator 6757.
hops, body size, sex determination, *Pimplinae* 7471.
nest building, *Cyrtocinus* 1185.
queens, foundresses, colonization 1893.
substrate preferences, *Xyletinus pelatus* 2701.
workers, intraspecific relationships effects on, *Bombus terrestris* 469
- Egg production**, *Aedes malayensis*, *Aedes polyensis* 1854.
blood meals, body weight, *Dermatocoris silvum*, China, People's Rep. 2704.
blood meals, body weight, *Ixodes ricinus*, Ireland 1126.
blood meals, oviposition, *Rhipicephalus sanguineus* 8256.
cages size effects on, rearing, *Anthonomus grandis grandis* 8238.
culture, sex ratio, stocking rates effects on, *Anopheles albimanus* 387.
egg laying, apiculture, *Apis cerana* 1145.
energetics, life history, reproductive strategy, *Gargaphia solani* 5911
fertility, fecundity, reproductive behavior, *Dendroctonus frontalis* 1150.
genotypes effects on, *Drosophila melanogaster* 7472.
Leptinotarsa decemlineata, British Isles 1440.
mass rearing, cages, oviposition, *Anthonomus grandis grandis* 4086.
methotrexate effects on, toxicity, *Bracon hebetor* 8203.
nervous system role, mating, *Rhodnius prolixus* 5080.
- Egg production**, (continued)
oviposition, etc., mating effects on, *Heliothis virescens* 8213.
oviposition, *Hybanthus bimaculata*, Switzerland 6718.
oviposition, mating stimuli, *Gryllodes virgatus* 9049.
oviposition, population levels, coprophilus fungi, *Lycoriella mali* 4479.
oviposition, substrate preferences, *Tetranychus pollenii* 6673.
potassium iodide ingestion, *Bombus mori* 6649
predator-prey interactions, temperature effects, *Coccinella californica*,
Coccinella trifasciata, *Acyrtosiphon pisum* 2878.
selection, media (culture), population genetics, *Tribolium castaneum* 1980.
sexual reproduction, oviposition, fecundity, sex ratio, *Lagria villosa* 6630
survival, overwintering, *Rhopalosiphum padi*, Finland 5225.
temperature effects on, *Pieris rapae* 7445
- Egg production**, mass rearing, fecundity, *Dacus cucurbitae*, Japan 1850.
- Egg shells**, ultrastructure, embryogenesis, *Drosophila melanogaster* 3510.
- Eggs**, abortion, genes, lethality, *Megoura viciae* 6252.
abundance, crop fields, seasonal variations, *Orius insidiosus*, *Nabis* 5322.
association, interspecific relationships, *Ellice puno*, *Camponotus inca* 7585.
avian sarcoma virus DNA genomes integration, *Drosophila melanogaster* 9379.
biochemical composition, embryogenesis, *Corcyra cephalonica* 4244.
biology, *Pleocoma*, USA, Oregon 6729.
brood care, maternal behavior, females, *Labidura riparia* 7489.
cholesterol, incorporation, ecdysteroids, oogenesis, *Schistocerca americana* 211.
chorion, ultrastructure, *Tenebroides mauritanicus* 6489.
clustering, association, *Lycamidae*, *Myrmecophilidae* 1193.
cold temperature, winter mortality, *Lymnania dispar*, Canada, Quebec 2127.
cold tolerance, seasonal variations, diapause, *Rhopalosiphum insertum* 6638.
conspecifics, effects on oviposition, *Euptychinae* 6675.
Corcyra cephalonica, *Trichogramma brassicae* rearing, UV radiation, temperature effects on 7450.
cornea, receptors development, ovulation, *Drosophila* 1079.
development, follicles epithelium, *Heteropoda pygmaea* 334.
development, males, females, temperature effects, *Apis mellifera* 1878.
development, strains, cytoplasmic inheritance, *Aedes polyensis* 1542.
development, survival, symbiosis, *Amylostereum areolatum*, *Sirex noctilio* 3470.
development, temperature effects, *Heliothis armiger* 1124.
development, temperature effects, *Oritus insidiosus* 1865.
development, temperature, *Enallagma ebrium*, *Enallagma vernale* 7025.
developmental stages, biochemical composition, fatty acids, *Spodoptera littoralis* 1082.
diapause, biochemical analysis, carbohydrates, metabolism, *Atrachya menestriesi* 1098.
diapause, *Diabrotica virgifera virgifera*, *Diabrotica longicornis*, *Diabrotica cristata*, *Diabrotica longicornis* longicornis, *Diabrotica virgifera* zea 8221.
diapause, hormones, *Bombyx* 2678.
diapause, hormones, metabolism, *Bombyx mori* 3474.
diapause, infestation, hatching, damage, crop production, *Diabrotica virgifera* 691.
diapause, protein composition, lines, *Bombyx mori* 9420.
diapause, termination, soil temperature effects on, *Delia coarctata* 3473.
diapause, 20-hydroxyecdysone effects on development, *Bombyx mori* 2675.
dispersal, *Pulvinaria mesembryanthemi*, USA, California 2160.
distribution, oviposition, host plants, host selection, *Oscinella frit* 7486.
distribution, oviposition, host plants *Sorghum bicolor*, *Atherigona soccata* 4288.
effects on, maternal behavior, *Labidura riparia* 3521.
emergence, inhibition, insecticides, benzophenyl urea, toxicology, biological control, *Tribolium castaneum* 3451.
encapsulation, parasites, *Metaphycus swirskii*, *Saissetia oleae* 5175.
enumeration, traps, oviposition, substrate specificity, methodology, *Aedes triseriatus* 860.
enzymatic activity, malate dehydrogenase, *Apis mellifera* 2563.
fertility, mating frequency effects on, *Papilio polydorus asterius* 7491.
fertilization, spermatozoa storage, *Baculum* 6654.
hatchability, fecundity, breeding success, *Adoxophyes* 1851.
hatchability, fecundity, oviposition, *Chilo suppressalis*, Japan 1909.
hatchability, inbreeding effects on, genetic load, *Leptodactylus* 7877.
hatchability, temperature effects on, *Bombyx mori* 6652.
hatching, diel variations, *Atherigona soccata* 4983.
hatching, incubation, environmental effects, *Pyralia perpusilla* 4259.
hatching, insecticides effects on, chemical control, *Keiferia lycopersicella* 3755.
hatching, oviposition, *Aedes albopictus* 5855.
host selection, parasitoids, *Heliothis virescens* 2815.
hosts, host searching behavior, kairomones, biological control, *Trichogramma pretiosum* 3357.
hygiene, effects on maternal behavior, *Labidura riparia* 1146.
immune response (cell-mediated), pathogens, *Asobara tabida*, *Drosophila melanogaster* 1819.
kairomones, *Adoxophyes*, host searching behavior, oviposition, *Ascogaster reticulatus* 7485.
larvae association, *Diptera*, *Anura*, South America 7816.
larvae feeding, new species, *Megalgaia argiopephaga* *Argiope* 7966.
larvae, morphology, *Euphranta connexa*, *Scambus brevicornis* 8040.
males, oviposition, host preferences, *Coccophagus cownepi* 2732.
mass rearing, *Heliothis virescens* 1457.
mass rearing, saline water, recycling, methodology, *Anthonomus grandis* 8854.
maturation, diel effects on, *Pectinophora gossypiella* 7459.
micromethods, injection, nuclei, *Drosophila* 8850.
moisture absorption, survival, *Anacidium aegyptium* 6849.
morphology, *Brachythemis contaminata* 8280.
morphology, *Caurinus detes*, USA, Oregon 7523.
morphology, coloration, identification, *Rhodnius* 4099.
morphology, development, *Coriema extensa*, USA, California 8290.
morphology, *Hemerobius stigma* 5639.
morphology, identification, *Callosobruchus*, *Caryedon*, *Acanthoscelides*, *Zabrotes* 5641.
morphology, keys, *Kallitambina australis* 866.
morphology, *Nannobittacus elegans* 6490.
morphology, phylogeny, *Pteronarcyidae* 8036.
morphology, *Sipylloidea sipylus*, *Ortines mackloti* 7267.
morphology, *Skwida brevis*, Japan 3840.
morphology, ultrastructure, *Bacillus subtilis* capri 4937.
mortality, oviducts, methomyl, *Heliothis punctiger*, *Heliothis armiger* 5380.

Eggs, (continued)

- mortality, parasitoids infestation, *Malacosoma americanum* 8314
 mortality, predators, *Empoasca fabae* 6046
 nymphs, morphology, *Perlinodes aurea* 8037
Orygia pseudosugata, parasites, *Telenomus californicus* 2014
 overwintering, development, environmental effects, soil temperature, *Diabrotica virgifera virgifera* 1863
 overwintering, diapause termination, temperature effects on, *Panonychus ulmi* 8214
 overwintering, *Euxoa sibirica*, Japan, Tohoku 7438
 overwintering, mortality, abundance, *Rhopalosiphum padi* 2682
 oviposition, diapause, survival, *Culicidae* 1373
 parasites, distribution, host plants, *Lygus*, *Nabis*, *Spisastilus festinus* 8384
 parasites, host population density effects on, *Trichogramma pretiosum* 4373
 parasites, *Leptinotarsa undecimlineata*, *Edovum putleri*, Colombia 2454
 parasites, *Leptinotarsa undecimlineata*, *Edovum putleri*, Colombia 2454
 parasites, *Macroleptia surcouei*, *Orchelimum fidicinum*, USA, Florida 5187
 parasites, new records, *Scutellista cyanea*, *Parasaissetia nigra*, India, Maharashtra 7540
 parasites, pest control, biological control, methodology, *Trichogramma*, *Heliothis* 1448
 parasites, *Trichogramma*, *Heliothis*, USA, Texas 4383
 parasitism, new records, *Ptychoneura*, *Rhopalum clavipes*, Canada, Ontario 4377
 parasitism, *Telenomus aradi*, *Aradus cinnamomeus*, Finland 5934
 parasitoids, *Clavigralla tomentosicollis*, Africa 2814
 parasitoids, host searching behavior, *Trichogramma*, *Heliothis zea* 5940
 parasitoids, life cycle, *Nilaparvata lugens*, *Sogatella furcifera* 9136
 parasitoids, venom, encapsulation, hosts, *Pteris rapae crucivora*, *Apanteles glomeratus* 8325
 paternal behavior, brood care, males, *Belostoma micantulum*, Paraguay 1147
 pathology, *Pleistophora disjuncta* infection, *Diabrotica morosa* 9008
 patterning, embryogenesis, *Eucelalis* 5069
 persistence, grazing, rangelands, *Hemileuca oliviae*, USA, New Mexico, Lincoln Co. 8575
 predation, crop fields, *Heliothis virescens*, USA, Texas 6124
 predation, development, *Epicausta pennsylvanica*, *Epicausta atrata* 6839
 predation, effects on population decline, *Pala rosea* 8385
 predation, larvae, pods, *Amblystoma maculatum*, *Chironomidae*, Canada, Quebec 1203
 predation, oviposition, host plants, *Pentapleura gossypiiella*, *Gossypium* 6157
 predation, *Solenopsis invicta*, *Aix sponsa* 6858
 predators, abundance, nectar effects on, *Heliothis virescens*, *Gossypium* 5971
 predators, *Dicordiplosis manihoti*, *Phenacoccus manihoti*, Africa 1624
 production, elimination, iron radioisotopes, environmental factors, *Drosophila melanogaster* 366
 proteinase inhibitors, purification, characterization, *Hemileuca oliviae* 2573
 proteins, diets, *Dysdercus koenigii* 7480
 sampling methods, *Sphenophorus parvulus* 8867
 sampling, pest control efficacy, *Heliothis armigera* 1692
 separation techniques, mass rearing, *Spodoptera frugiperda* 2491
 shells, minerals, *Phasmodus* 6633
Sitona hispidulus, parasitoids, fecundity, *Patasson lameerei* 2817
 size, fecundity, age effects, *Schistocerca gregaria* 4276
 size, genetic factors, tetraploidy, *Bombyx mori* 3088
 spatial distribution, horizontal distribution, oviposition, *Arachis hypogaea*, *Elaeagnus angustifolia* 1139
 spatial distribution, temporal variations, oviposition, *Gossypium*, *Heliothis armigera* 1154
 spatial distribution, trees, *Colaradia pandora*, USA, Arizona 6035
 staining, methodology, *Limnomyza trifolii* 4083
 suitability, hosts age effects on, parasitoids, *Trichogramma*, *Seponon fuscipennis* 8320
 surface properties, ultrastructure, *Araeneae* 8039
 survival, breeding, manure, *Cochliomya hominivorax* 6037
 survival, development, soil properties effects on, *Popillia japonica* 1864
 survival, fertility, *Athenogona soccata* 4434
 survival, microbiocidal activity, methyl-para-hydroxy benzoate, *Schistocerca gregaria*, *Locusta migratoria migratorides* 5821
 survival, mortality factors, colonies size, *Neodipron serifer* 1270
 survival, staining, *Magiciada* 2702
 susceptibility, parasitoids, *Trichogramma minutum*, *Choristoneura fumiferana* 8329
 temperature effects, duration, *Simulium nigritarse*, *Simulium adersi* 1483
 toxicity, fenthion, *Rhodnius prolixus* 9022
 toxicity, insecticides, *Spodoptera littoralis* 6615
 toxins, biochemical analysis, *Amblyomma hebraeum* 1070
 trapping, females, predictions, population levels, *Della coarctata* 1290
 traps, oviposition, methodology, *Phthorimaea operculella* 857
 ultrastructure, population studies, *Clonopsis gallica* 6634
 ultrastructure, water balance, *Acanthoscelides obtectus* 2499
 vitellin, binding, molting hormones, *Locusta migratoria* 3515

Egypt,

- abundance, association, *Acarna*, *Lepidostaphes beckeri*, *Aonidiella auranti* 6877
 abundance, parasites, crop fields, *Insecta*, *Trifolium alexandrinum* 6876
 abundance, sex ratio, *Auchenorrhyncha* 6950
 agricultural ecosystems, soil fauna, abundance, species composition, *Insecta* 7011
 crop fields, predators, pests, abundance, seasonal variations, *Gossypium* 6971
 domestic animals, infestation: seasonal variations, *Ixodidae* 6895
 dunes, habitat, host plants, population dynamics, *Brachymeria spinicollis* 7591
 host plants, abundance, species composition, *Insecta*, *Trifolium alexandrinum* 6811
 host plants, species composition, *Insecta*, *Convolvulus arvensis* 6807
 infestation, abundance, weeds, *Gossypium*, *Acarna* 6974
 life cycle, abundance, host plants, *Phytomyza urubanchae*, *Orobancha crenta* 6812
 life cycle, host plants, *Hypoxilus nubilus*, *Amaranthus caudatus* 6730
 new records, geographical distribution, host plants, *Phyllocolpa violae* 7103
 new species, taxonomy, morphology, *Neopocis aegyptiacus* 4908
 new species, taxonomy, morphology, *Suricataeus fenecus* 6448
 ornamental plants, infestation, pests, *Lindingaspis rossi* 7650
 ornamental plants, pests, abundance, *Lepidosaphes tapleyi* 6955
 pests, abundance, seasonal variations, *Trifolium* 6978
 pests, crop fields, taxonomy, *Jassidea* 6419
 pests, population dynamics, *Ceroplastes fiondensis* 6949
 pests, population dynamics, *Myzus persicae*, *Aphis gossypii*, *Empoasca decipiens*, *Solanum tuberosum* 6958
 surveys, parasites, pests, *Spodoptera littoralis* 6975

Egypt, (continued)

- surveys, weeds, abundance, *Insecta* 6957
 Egypt, Arab. Rep.,
 parasites, abundance, *Anthropoda*, *Rodentia* 3588
 taxonomy, identification, status, *Insecta* 3177
 Egypt, Arab Rep.,
 pest control, pheromone traps, socio-economic aspects, *Spodoptera littoralis* 8490
 plant diseases, disease transmission, *Cicadulina bipunctata* zae 8471
 prey species composition, webs, *Dictyna* 480
Eichloria crassipes,
 biological control, rearing, life history, *Azarna densa* 3550
 weed control, biological control, *Sameodes albiguttalis*, USA, Florida 692
Ellica puno,
 eggs, association, interspecific relationships, *Camponotus* 14 7585
Emfieldia dissidens,
 hosts, morphology, parasites effects on, *Mermithodea* 7393
 Eire,
 development, foraging behavior, environmental conditions, *Ixodes ricinus* 5898
 geographical distribution, species diversity, environmental conditions, bogs, *Chironomidae* 7806
 introduced species, occurrence, *Insecta* 9451
 new records, geographical distribution, *Acartophthalmus nigrinus*, *Agathomyia* 7889
 new records, geographical distribution, habitat, *Nelima gothica*, *Lacinus ephippianus*, *Mitopus morio*, Eire 6311
 occurrence, new records, *Insecta* 9454
 Eire, Cork Co.,
 occurrence, migrants, *Lepidoptera* 9453
 Ejaculation,
 seminal fluid competition, enzymes alleles, *Drosophila melanogaster* 2731
 Ejaculatory duct,
 accessory gland, histology, *Stomoxys calcitrans* 5063
 simplex, histology, cytology, *Calpodus ethiops* 9041
 El Salvador,
 malaria vectors, biological control, parasites, *Romanomermis culicivora*, *Anopheles albimanus* 7645
 EL-494,
 growth regulators, agrochemicals, metabolism, *Lymnaea dispar*, *Glycine max* 4999
Elachista nielsowii,
 morphology, females, Finland 4114
 Elaphidion listeyi,
 host plants, geographical distribution, USA, Texas 1944
 Elaphidion minicellum,
 host plants, geographical distribution, USA, Texas 1944
 Elaphus americanus,
 enzymes, polymorphism, coloration, vertical distribution, altitudes, North America, Pacific Northwest 9217
 taxonomy, phylogeny, genetics 3189
Elaeagnus angustifolia,
 eggs, spatial distribution, horizontal distribution, oviposition, *Arachis hypogaea* 1139
 parasites, new species, *Invreia*, USA, Texas 3221
 parasitism, *Ogriulus elasmopalpi*, *Apantes*, *Pristomerus spinator*, *Invreia deceptor*, USA, Texas 3577
Elastomesthus humeralis,
 indole-3-acetic acid metabolism, gut 3311
Elausmus funereus,
 parasites, incidence, *Phthorimaea operculella*, Australia, Queensland 2828
Elausmus polistes,
 parasites, *Polistes exclamans*, mortality, population dynamics 2155
 Elatideidae,
 species composition, population levels, *Saccharum officinale* crop fields, Brazil, Sao Paulo 6098
 Elatichrosis,
 pest control, chemical control, *Solanum tuberosum* crop fields 3829
Elaionura phuatae,
 new species, taxonomy, morphology, Senegal 7999
 Elidana saccharina,
 biology, behavior, pests, *Saccharum officinale*, Ivory Coast 2098
 mating behavior, activity patterns, display 1906
 pheromones, glands, anatomy, males 5017
 predators identification, electrophoresis, serological tests 2110
 Fildria,
 insecticides, synergists, piperonyl butoxide, MGK 264, DEF, mortality, *Spodoptera littoralis* 9023
 Electric currents,
 electrochemistry, skeletal muscle, *Tenebrio molitor* 116
 neurons, epithelia, sensors, *Acheta* 2528
 power lines, effects on colonies, *Apis mellifera* 1866
 skeletal muscle, *Tenebrio* 892
 Electric fields,
 power lines, effects on colonial characteristics, *Apis mellifera* 7570
 power lines, effects on colonies, *Apis mellifera* 1866
 Electrical properties,
 cuticle, resistance, temperature effects, diets, *Vespa orientalis* 3272
 cuticle, temperature effects, *Vespa orientalis* 4118
 frontal ganglion, circadian rhythms, *Periplaneta americana* 8068
 mechanoreceptors, colchicine effects on, *Periplaneta americana* 3291
 morphology, chemoreceptors, *Rhagoletis pomonella* 4136
 muscles, *Manduca sexta* 2518
 neuromuscular junctions, synapse, *Lepidoptera* 4116
 neurons, muscles, motor activity, *Paruroctonus mesaensis* 113
 neurons, muscles, motor activity, *Paruroctonus mesaensis* 120
 neurophysiology, auditory perception, receptors, *Corixa punctata* 4134
 photoreceptors, compound eyes, *Locusta migratoria* 3293
 physiology, piezoelectricity, pyroelectricity, integument, *Blaberus giganteus* 886
 Electrical stimulation,
 effects on antennae regeneration, *Lithobius forficatus* 1090
 ganglia, flight, optomotor response, *Calliphora erythrocephala* 894
 neurons, control, flashing, males, *Phouris versicolor* 994
 Electroantennograms,
 attractants, pheromone traps, *Tetania bonifatella* 5701
 chemical stimuli, attractancy, *Diaprepes abbreviatus* 5669
 olfactory perception, pheromones, *Ostrinia nubilalis* 1739

Electroantennograms, (continued)

olfactory perception, sex pheromone, *Spodoptera littoralis* 1738.
olfactory stimuli, sex pheromone, attractants, *Anthonomus grandis* 5006
sensilla trichodea, synthetic sex pheromone, *Spodoptera eximpta* 7344
sex differences, sex pheromone mimics, *Periplaneta americana* 970.

Electrochemistry,

electric currents, skeletal muscle, *Tenebrio molitor* 116.
flight muscle, potassium, mutation, *Drosophila* 5660

Electron microscopy,

antennal sensilla, ultrastructure, juveniles, *Polydesmus coniareus* 75
chromosomes, microtubules, *Lepidoptera* 3079
femur spine neurons, mechanoreceptors, *Periplaneta americana*, 122.
ribosomes, salivary gland, *Chironomus tentans* 4675
tubulin ribonucleoproteins, structure, *Drosophila melanogaster*, *Calliphora erythrocephala* 7839

Electron microscopy (scanning),

pentropic membranes synthesis, development, ultrastructure, *Trichoplusia ni* 340

Electron transport,

respiration, enzymatic activity, mitochondria, inhibitors effects on, *Musca domestica* 953.

Electronic equipment,

incubation, bioassays, insecticides, field trials, *Lygus hesperus*, *Acyrtosiphon pisum* 8015
measurements, ingestion, saliva, *Nephotettix cincticeps* 1699.
repellents, efficacy, *Aedes* 8424.

Electrophoresis,

cyanide, hemoglobin, heterogeneity, *Chironomus thummi* 920
enzymes, developmental genetics, body length, *Tabanus nigrovittatus* 2336
enzymes, pesticide resistance, pesticides (organochlorine), strains, *Anopheles stephensi* 4216
enzymes, phylogeny, *Bombus*, *Psithyrus* 4700
enzymes, phylogeny, *Phoridae*, Europe 5506
enzymes, population studies, identification, africanized honeybees, *Apis mellifera* 8026
enzymes, population studies, *Mansonella crassipes*, *Mansonella uniformis* 5691
fractionation ribosomal proteins, mitochondria, *Locusta migratoria* 3265.
glucosephosphate isomerase, *Toxorhynchites splendens*, *Toxorhynchites lecontei*,
Toxorhynchites metallicus 5683

identification, pathogens, *Trypanosomandae*, *Insecta* 5032

lipoproteins, phenotypes, developmental stages, *Isotoma yigna* 4155

loci, enzyme activity, *Simulium venustum*, *Simulium vancouveri* 7031

serological tests, predators identification, *Eldana saccharina* 2110

speciation, population genetics, *Anopheles hyrcanus* 1565

species identification, complex, *Xestia* 68

Electrophysiological recording,

abdomen, injury, *Locusta* 8915
antennal sensilla, chemical stimuli, pheromones, *Yponomeuta* 4143.
antennal sensilla, pheromones enantiomers, *Dendroctonus frontalis* 4313
chemoreception, feeding behavior, anatomy, *Phormia regina* 914
chemoreceptors, effects on feeding behavior, *Phormia regina* 1737.
compound eyes, light sensitivity, light traps, *Spodoptera exigua*, *Spodoptera frugiperda* 911.

compound eyes, visual perception, light intensity, *Lepidoptera* 7300.

feedback control, leg muscles, *Carassius morosus* 890.

instruments, design 1680

mechanoreceptors, *lyriform* slit sense organs, transfer, *Cupienius salei* 4129

olfactory perception, lemon oil components, antennae, *Periplaneta americana* 7295

piezoelectricity, pyroelectricity, integument, *Blauberus giganteus* 886

sense organs, *Arthropoda*, bibliographies, methodology 4758

temperature receptors, temperature effects on, *Rhipicephalus appendiculatus* 235

Electropotential,

cell differentiation, ovary, *Cecropia*, *Rhodnius* 3512.

oocytes, ion exchange, *Locusta migratoria* 1134.

Electroretinograms,

compound eyes, wavelength sensitivity, bioluminescence, *Photuris versicolor* 2540.

electrophysiology, light adaptations, *Romalea microptera* 148.

Eleutherozoa,

new species, taxonomy, fossils, Tertiary 792.

Elencus koebelei,

parasitoids, developmental stages, *Prokelisia marginata*, USA, Florida, Oyster Bay 4368.

Eleodes,

activity patterns, seasonal variations, USA, New Mexico 8284.

Eleodes fusiformis,

capture-recapture studies, seasonal variations, population density, survival 595.

Eleodes obscurus,

capture-recapture studies, seasonal variations, population density, survival 595.

Eleodes obscurus,

interspecific competition, USA, New Mexico 2157.

Eleusine oryzae,

genotypes, pest resistance, *Sesamia inferens*, *Myllocerus maculosus* 5408.

Eleusine indica,

food organisms, feeding behavior, food preferences, *Spodoptera frugiperda* 3566.

Eleutherodactylus coqui,

food organisms, survival, body size effects on, predation, *Olios* 1293.

Eligmodontia zizae gigantea,

new subspecies, taxonomy, morphology, USSR, Caucasus 4043.

Elmationia,

iron radioisotopes, eggs production, environmental factors, *Drosophila melanogaster* 366.

man, *Scarabaeus*, life *Onthophagus*, India 9258.

radioisotopes, chromium, strontium, symbionts effects on, *Gromphadorhina portentosa*, *Gromphadorhina laevis* 8108.

Elkneria padilunda,

life cycle, taxonomy, Spain, Iberian Peninsula 5157.

Elmidae,

geographical distribution, world, surveys 5507.

Elmis aenea,

respiratory organs, morphology, larvae 6537.

Elongation,

filipodium, leukocytes (granulocytic), temperature, hemolymph, effects on, *Bombyx mori* 8073.

Elongeuna speophium,

new species, new genera, taxonomy, morphology, USSR 8843.

Elsella,

new genera, taxonomy, systematics 2434.

Elymana sulpharella,

food quality, food consumption, oviposition, nutrient utilization 3547.
species composition, species diversity, grasslands, Austria 6869.

Elytra,

phylogeny, functional morphology, anatomy, evolution, *Staphylinidae* 7288.

Elytropsocus,

new genera, morphology, New Guinea 3232.

Emaphysa,

activity patterns, seasonal variations, USA, New Mexico 8284.

Emblemasoma erro,

taxonomy, morphology, America 4926.

Embryo cells,

cell culture, *Ceratitis capitata* 95

cell culture, *Chironomus*, ultrastructure, *Boophilus microplus* 875.

cell lines, actin acetylation, *Drosophila* 184

lysis, differentiation, antibodies effects on, *Drosophila* 368.

mutants, thorax ganglia, central nervous system, *Drosophila* 8648.

Embryogenesis,

antennal sensilla, *Drosophila melanogaster* 6635

biochemical composition, eggs, *Coryca cephalonica* 4244.

biochemistry, oogenesis, maternal effects, reviews, *Insecta* 5837.

blastoderm, cell division, *Drosophila* 3461.

blastoderm cells, *Drosophila* 2670.

blastoderm determination, metameric pattern, reviews, *Drosophila* 4246.

defective mutant, *Drosophila melanogaster* 1872.

deficient mutant, maternal effects, *Drosophila* 764.

development, nervous system, muscles, *Periplaneta americana* 5812.

development, *Periplaneta americana* 5070.

developmental stages, parasitoids, *Mormoniella vitripennis* 5068.

developmental stages, phylogeny, *Neomicromyrtax nipponensis* 330.

diapause, temperature effects on, *Leptophyes punctatissima* 8240.

Dolichovespa saxonica 6636.

dorsal organ, *Collembola* 3401.

ecdysteroids levels, *Schistocerca gregaria* 7331.

ecdysteroids, synthesis, metabolism, *Locusta migratoria* 3345.

egg shells ultrastructure, *Drosophila melanogaster* 3510.

eggs development, follicles epithelium, *Heteropeza pygmaea* 334.

eggs, ultrastructure, water balance, *Acanthoscelides obectus* 2499.

endocrine system, *Citunus* 2671.

epithelium, invaginations, *Manduca* 3457.

fumigation effects on, antitallatropin precocene 2(P2), *Dermacentor variabilis* 9344.

genes, α -tubulin transcription, *Drosophila melanogaster* 6242.

growth, peripheral nerves, central nervous system, *Acrididae* 332.

2-hydroxyecdysone effects on, *Armadiillium vulgare* 370.

2-hydroxyecdysone effects on, *Drosophila* 5811.

unaginal discs

juvenile hormones, precocene II, effects on, *Oncopeltus fasciatus* 2703.

juvenoids effects on, *Earias fabia* 5828.

midgut, ultrastructure, *Citunus extradentatus* 4247.

molt hormones, *Bombyx mori* 3463.

morphogenesis, digestive tract, *Manorpa pryeri* 3458.

Neomicromyrtax nipponensis 4248

neurons, leg, *Locusta migratoria* 337.

ovoviviparity, molting, juvenile hormones, morphology, *Nauphoeta cinerea* 3514.

parasitoids, temperature effects, host-parasite interactions, instars, *Ostrinia nubilalis*, *Macrococcus grandis* 3489.

patterning, eggs, *Eucselis* 5069.

peripheral nerves, axons growth, *Acrididae* 333.

phenology, eclosion, *Laspesyesia pomonella* 8215.

predators effects on polymorphism, *Chaoborus americanus*, *Daphnia pulex* 572.

protein biosynthesis, DNA, RNA, *Hyalomma dromedarii* 5829.

ribosomal proteins biosynthesis, protein biosynthesis, *Drosophila* 1537.

tergites, *Drosophila* 5813.

tubulin gene expression, *Drosophila melanogaster* 3066.

ultrastructure, germ cells, *Tetradontophora bielanensis* 7428.

ventral gland, ultrastructure, development, *Carassius* 6596.

wing disks, gap junctions communication, *Drosophila* 5100.

Embryology,

development, *Arthropoda* 3459.

differentiation, cuticle, tissues, *Drosophila melanogaster* 1093.

quantitation, mitosis, *Calliphora erythrocephala* 1078.

temperature effects, development, males, females, *Apis mellifera* 1878.

Embryos,

avian sarcoma virus DNA genomes integration, *Drosophila melanogaster* 9379.

cell lines, cell culture, *Melanoplus sanguinipes* 4115.

cell lines, ecdysterone effects on cyclic AMP, cyclic GMP, *Drosophila melanogaster* 2571.

cell surface membranes, adenosinetriphosphatase hydrolysis

β -(2-furyl)-acryloyl phosphate, *Manduca sexta* 4949.

central nervous system development, markers, immunochemistry, *Drosophila* 8913.

development, *Baculum* 5810.

development, nerves, muscles, leg, *Periplaneta americana* 8216.

development, radiation, oxygen effects on, *Drosophila melanogaster* 1120.

DNA polymerase association DNA primase, *Drosophila melanogaster* 9066.

DNA primase priming activity, *Drosophila melanogaster* 8626.

gene expression, chorion, development, *Saturniidae* 3884.

head development, proteins effects on, *Smittia* 1085.

inorganic pyrophosphatase activity, *Hyalomma dromedarii* 3316.

lethality, Y chromosome unislocations, genetic control, *Hyalemya antiqua* 2316.

molting, scanning electron microscopy, *Oncopeltus fasciatus* 2873.

monitoring, population dynamics, *Macrosiphum euphorbiae* 2873.

morphology, larvae, *Pedontus unimaculatus*, comparison, *Petrobius brevitylis*,
Machilis alternata 336.

nuclear membranes, proteins, isolation, characterization, *Drosophila melanogaster* 4283.

nuclei, high mobility group proteins, purification, characterization, *Drosophila melanogaster* 747.

protein biosynthesis, mRNA translation, *Manduca sexta* 3887.

proteinase inhibitors, characterization, *Hemileuca olivacea* 4245.

satellite DNA distribution, nuclei, nucleotide sequence, *Drosophila virilis* 3874.

ultrastructure, gap junctions, septate junctions, *Manduca sexta* 3462

Emergence,

activity patterns, ecological distribution, *Diptera*, Canada, Ontario, Salem Creek 3856.

age composition, larvae, *Uropetala carovei carovei*, New Zealand, Wellington 9085

Subject Index

Emergence, (continued)

- age effects, survival, fecundity, adults, *Monochamus alternans* 2905.
 biotypes, mathematical models, *Heliothis zea*. USA 2695.
 biotypes, *Nephotettix cinctipes*, Japan 2297
 circadian rhythms, light effects on, *Monarthropalpus bxy* 6713
 climbing, body size, larvae, *Laculia cruciata* 3861
 colonies, population levels, effects on, predatory behavior, *Polistes chinensis*
 antennalis 2788.
 development, carvone effects on, diets, *Spodoptera littoralis* 8231.
 development, temperature effects, *Liriomyza sativae* 1869.
 development, temperature effects on, *Rhagoletis indifferens* 5834
 diapause induction, photoperiod changes, *Acalolepta luxuriosa* 1094.
 diapause, population dynamics, *Megastigmus specularis*, *Megastigmus spermotrophus*
 5995.
 diapause, pupae, genetics, hybrids, *Heliothis virescens*, *Heliothis subflexa* 347.
 diapause, temperature effects, cold, *Pikonia alaskensis* 3495.
 diel periodicity, factors affecting, light, water temperature, *Chironomidae*,
 Canada, Ontario, Windrow Farm Stream 8604.
 diel variations, streams, *Chironomidae*, Canada, Ontario 6224
 diets effects on, nutrient sources, proteins, sucrose, *Anthonomus grandis grandis*
 8276.
 diurnal variations, pests, *Chilo partellus*, India 5135.
 effects on, longevity, adults, *Circulio caryae* 456.
 effects on, nest building, oviposition, *Dendroctonus frontalis* 1879.
 environmental effects, *Cyclocephala* 1971
 environmental effects, pest control, *Dendroctonus rufipennis* 6960.
 environmental effects, photoperiods, phenology, *Tricoptera*, Austria 3864
 environmental factors, *Chironomidae*, Netherlands, Wolderdijk L 751
 fecundity, *Chilo suppressalis*, Japan 1909.
 flight activity, overwintering, *Thanaosia dubius* 9084.
 flight, patterns, temperature effects, spring, *Ostrinia nubilalis* 2102.
 galls, host plants, *Urophora cardui*, *Cirsium arvense* 8354.
 galls, infestation, *Phytomyza palustris*, *Zizyphus jujuba*, India 6798.
 host plants, parasites, *Metzneria apriliella* 5140.
 infection effects on, pathogens, *Vainmora necatrix*, *Ostrinia nubilalis* 8168.
 inhibition, eggs, insecticides, benzylphenyl urea, toxicology, biological
 control, *Tribolium castaneum* 3451.
 juvenile hormones analogs effects on, *Sitotroga cerealella* 1062.
 juvenile hormones effects on, methoprene, control programs, *Culex*
 quinquefasciatus, *Anopheles stephensi*, *Aedes aegypti* 1360.
 larvae, biology, *Microdon fuscipennis* 2778.
 life cycle, host plants, *Prosopis*, *Tratolopha euphemella*, USA, Texas 5961
 life cycle, *Perlesta placida*, USA, Texas 3859.
 life cycle, pest control, *Hylemya antiqua* 6143.
 life history, *Agromyza frontella*, Canada, Ontario 2782.
 life history, vectors, *Aedes africanus* 3687.
 mortality, workers, queens age effects on, *Apis mellifera* 8595.
 overwintering behavior, *Hemiptera*, USA, South Carolina 455.
 overwintering, mortality, crop fields, *Cylindrocryptus adspersus* 5896.
 overwintering, parasites effects on, *Microctonus vittae*, *Phyllostreta*
 cruciferae, *Phyllostreta striolata* 8316.
 parasites, infestation, *Trifurcula crypella*, *Coleophora discordeella* 5180.
 parasites, host-parasite interactions, *Poecilostictus cothurnatus*, *Bupalus*
 prunarius, Netherlands 5179.
 parasitoids, insecticides effects on, *Amitus hesperidum*, *Prospaltella opulenta*
 2245.
 parasitoids, juvenile hormones effects on, *Apanetes congregatus*, *Manduca sexta*
 5935.
 periodicity, diel activity, environmental conditions, *Chironomidae*, USA, Florida
 152.
 pest attack, *Dendroctonus frontalis* 6680
 phenology, community composition, abundance, *Chironomidae*, Canada, Alberta,
 Bigory R 752.
 population density, aggregation, *Magdica septendecim* 2154
 population dynamics, galleries construction, infestation, mathematical models,
Dendroctonus frontalis 3643.
 protandry, *Papilio polytes* 6725.
 rearing methodology, *Diptera* 7248.
 reproductive strategy, protandry, *Lepidoptera* 5885
 Sciophytes, obscure, USA, Oregon 448.
 seasonal variations, *Anthonomus grandis*, USA, Tennessee 446.
 seasonal variations, occurrence, *Ephemeroptera*, USA, Virginia 3054
 soil moisture, soil temperature effects on, *Pectinophora gossypiella* 6013
 species composition, abundance, *Empididae*, *Dolichopodidae*, Germany, Fed. Rep
 3865.
 temperature effects on, pupae, *Megachile rotundata* 8230
 temperature effects, overwintering, *Heliothis virescens*, USA, Arizona 1862
 temperature effects, simulation, *Popillia japonica* 367.
 temperature effects, species composition, *Chironomidae*, USA, Mississippi 750
 tillage effects on, *Heliothis zea*, *Heliothis virescens* 2247.
 toxicity, rose bengal, erythrosin B, chemical control, *Musca autumnalis* 2233
 traps, catching methods, aquatic environment, *Chironomidae* 6471
 traps, catching methods, larvae, *Culex* 6467
 water levels, *Culiseta melanura*, *Culiseta moritani*, USA, New York, Toad Harbor
 Swamp 6875.
Emeline,
 effects on transcription, RNA biosynthesis, salivary gland, *Chironomus thummi*
 5019.
Emex australis,
 biological control, introduced species, *Periphan antiquum*, Australia 6078
 weed control, developmental stages, attack, *Periphan antiquum* 5205
Emmelestis besucheti,
 new species, new genera, taxonomy, morphology, Lebanon 7164
Empididae,
 emergence, species composition, abundance, phenology, geographical distribution,
 Germany, Fed. Rep 3865
 rare species, species composition, Czechoslovakia 7901
Empoasca,
 abundance, soil amendment effects on, mulches 1287
Empoasca abrupta,
 survival, development, host plants effects on 2090
Empoasca decipiens,
 population dynamics, pests, *Solanum tuberosum*, Egypt 6958
Empoasca dolichi,
 life history, development, Nigeria 2772
 new records, geographical distribution, Africa 33

- Empoasca fabae**,
 abundance, soil, USA, Pennsylvania 5229.
 crops damage, *Medicago sativa* 9292
 infestation, age effects, resistance, *Solanum tuberosum* 3597.
 mortality, eggs, predators 6046
 occurrence, soil, night, USA, Pennsylvania 9104.
 pests, effects on yield, *Medicago sativa* 731.
 sampling methodology, population density, crop fields, *Medicago sativa* 8470.
 temperature effects, development, morphometry, mortality, controlled conditions
 371.
Empoasca flavescens,
 population studies, infestation, cultivars, Aruna, Assam local, Bilara local,
 Udaipur local 2158
Empoasca kerri,
 population dynamics, life cycle, Pakistan 9161
Empoasca kraemeri,
 abundance, crop fields, mulches effects on 2246
 chemical control, insecticides, systemic, aldicarb, thiofanax, bufencarb 6196
 host plants pest resistance, damage, population genetics, *Phaseolus lunatus* 8459
 pest resistance, *Phaseolus lunatus* 4592
 population dynamics, crop fields, Vigan unguiculata, *Phaseolus vulgaris*, Brazil
 6044.
Empoasca lybica,
 pests, infestation, effects on yield, *Solanum melongena* 8485
Empoasca papayae,
 vectors, disease transmission, Carica papaya necrosis, rhabdovirus, Venezuela
 7660
Empoasca silakou,
 new species 6 new species, Africa 33
Empoascanara katungurica,
 new species, taxonomy, morphology, Uganda, Rwenzori Natl. Park 7203.
Empoascanara ugandana,
 new species, taxonomy, morphology, Uganda, Rwenzori Natl. Park 7203.
Emulsifiers,
 toximal MP-8, mutagenicity testing, spermatozoa, *Drosophila melanogaster* 300
Enallagma,
 conspecifics recognition, tactile stimuli, mating behavior 6669
 pollution effects, acute toxicity, endosulfan 292
Enallagma cyathigerum,
 spermatozoa storage, females 8210
Enallagma ebrum,
 oviposition, development, eggs, temperature 7025
Enallagma vernale,
 oviposition, eggs, development, temperature 7025.
Enantiomers,
 pheromones, attractancy, *Dendroctonus frontalis* 4313.
Enapholodes rufulus,
 pest control, forests, USA, Ohio 2209
Encapsulation,
 eggs, parasites, *Metaphycus swirskii*, *Saiaetia oleae* 5175.
 eggs, parasitoids venom, hosts, *Pieris rapae crucivora*, *Apanetes glomeratus*
 8325.
 insecticides, environmental impact, apiculture, economics 7684
 pesticides, control, legislation, apiculture, USA, Massachusetts 3732.
Encarsia,
 taxonomy, keys, *Prospaltella* 2456.
Encarsia abatei,
 new species, taxonomy, morphology, Africa 4881
Encarsia berlesii,
 natural enemies, pests, abundance, *Pseudaulacaspis pentagona* 6089
Encarsia formosa,
 flight activity, diurnal variations, seasonal variations 9116.
 parasites, biological control, control programs, *Trialetrodes vaporariorum* 1424.
 parasites, pest control, biological control, greenhouses, *Trialetrodes*
 vaporariorum, Japan 7789
 parasites, pest control, *Trialetrodes vaporariorum* 7726.
 parasites, temperature effects on development, *Trialetrodes vaporariorum* 5823.
Encarsia miteo,
 new species, taxonomy, morphology, Africa 4881
Encarsia opulenta,
 parasites, dispersal, biological control, *Aleuracanthus woghmi*, USA, Florida
 4544.
 parasitoids, host searching behavior, oviposition, *Aleuracanthus woghmi* 2830.
Encarsia prospaltella,
 taxonomy, morphology 2450
Encheopae,
 reproductive isolation, sympatric populations, life history 6856
Enchytraeidae,
 decomposition, leaf litter 2133
Encyrtidae,
 morphology, taxonomy, Africa 1649
 parasites, *Antonia grammis*, South Africa 2029
 setae, wings, coupling 1726
 taxonomy, systematics 4025
Encyrtus aequus,
 new species, taxonomy, morphology, South Africa 8824
Encyrtus melas,
 new species, taxonomy, morphology, South Africa 8824
Endangered species,
 ecological distribution, abundance, *Anthocharis cethura catalina*, USA,
 California, Catalina I, 2105
 population decline, conservation, *Callosamia scurfera*, North America 2106.
 rare species, Insecta, British Isles 2118
 wildlife conservation, education, *Lepidoptera*, British Isles 2123.
 wildlife conservation, Invertebrata 2147
Endocrine function,
 cells, midgut, exocytosis, secretions, granules, *Periplaneta americana* 8077.
 diapause, corpora allata, females, *Tetrix undulata* 3481.
 spermatogenesis, Insecta 3508
Endocrine glands,
 ultrastructure, role, vitellogenesis, *Boophilus microplus* 989
 ventral gland, ultrastructure, development, embryogenesis, *Carausius* 6596.
Endocrine system,
 development, ecdysteroids, ovaries, *Bombix mori* 4162
 digestive tract cells, ultrastructure, *Lepidoptera* 924.
 embryogenesis, *Chitunus* 2671.

Endocrine system, (continued)

growth regulators, interference, juvenile hormones, pest control, *Insecta* 8447
midgut cells, ultrastructure, *Blattaria* 101

Endocrinology,

pest control, juvenile hormones, precocenes, *Insecta* 8442.
physiology, neurophysiology, *Insecta* 3955.

Endoneuritis,

synonymy, *Megaselia* 7181.

Endosulfan,

acute toxicity, *Enallagma* 292.
efficacy, pest control, chemical control, *Chilo partellus* 7758
insecticides, chemical control, efficacy, *Holotricha consanguinea* 7792
insecticides, dusts, efficacy, *Amrasca biguttula biguttula* 7749
insecticides, field trials, chemical control, *Calocoris norvegicus*, *Sidna linbergi* 8476
insecticides, toxicity, *Phylloxera* *blancardella*, *Apanteles ornigis* 8200.
insecticides, weathering, effects on efficacy, *Epilachna vigintioctopunctata* 7712.

pest control, crop fields, *Spodoptera litura*, *Brassica oleracea capitata* 8439.
pest control, efficacy, *Lipaphis erysimi* 7736.

Endothenia daeckana,

sexual reproduction, life history, interspecific relationships, host plants, *Sarracenia purpurea*, Canada, Quebec 4328

Endothenia hebesana,

new records, geographical distribution, Sweden 4722.

Endotoxin,

Bacillus thuringiensis, bioassays, cells, culture, *Choristoneura fumiferana* 879
Bacillus thuringiensis, pathology, *Galleria mellonella* 1023
effects on gut histopathology, *Bacillus thuringiensis*, *Pieris rapae*, *Lymantria dispar*, *Ephestia cautella* 7382.
pathology, δ -endotoxin, *Aedes aegypti* 2637
toxicity, histopathology, *Bacillus thuringiensis*, *Pieris rapae*, *Lymantria dispar*, *Ephestia cautella* 7381

Endotoxins,

mutagens, effects on RNA biosynthesis, *Bacillus thuringiensis*, *Insecta* 7369.
susceptibility, geographical variations, *Bacillus thuringiensis*, *Anopheles stephensi*, *Aedes aegypti*, *Aedes albopictus*, India 8993
toxicity, *Bacillus thuringiensis*, *Insecta* 7365.

Endria linica,

host preferences, grasses 710.

survival, turf, mowing 6132.

Endria,

analogs, toxicity, *Diptera* 1072.

Endrosis sarcitrella,

stored products pests, abundance, distribution, British Isles, Scotland 2264.

Energetics,

activity, reproductive strategy, *Collembola* 6843.
coexistence, *Ephemera*, USA, Pennsylvania, White Clay Creek 5430.
development, diets effects on, *Acrotylus insubricus* 2693.
development, temperature effects, migration, *Oncophanes fasciatus*, *Lygaeus kalmii* 2783.
egg production, oviposition, *Rhipicephalus sanguineus* 8256.
flight activity, lipid metabolism, *Rhodnius prolixus*, *Triatoma infestans* 4955
flight activity, *Malacosoma americanum* 891.
flight activity, physiology, age effects, *Apis mellifera* 4241.
flight activity, *Sphingidae* 118.
flight activity, velocity, *Locusta migratoria migratorides* 8062.
foraging behavior, *Helianthus annuus* pollen, *Apis* 6735.
foraging behavior, predation, habitat variation, *Argiope trifasciata*, *Araneus trifolium* 8297.
life history, reproductive strategy, egg production, *Gargaphia solani* 5911
metabolism, overwintering aggregation, *Danaus plexippus*, USA, California 6844.
metabolism, oxygen consumption, colonies, *Apis mellifera* 4641
pigmentation, polymorphism, photoperiod effects on, *Megoura* 2699
reproductive effort, sex differences, *Cystosoma sandersi* 9063
streams, allochthonous input, *Coleoptera*, *Diptera*, *Homoptera*, *Arachnida*, *Lepidoptera* 8373.
thermoregulation, flight, *Malacosoma americanum* 6524.
thermoregulation, swarms, *Apis mellifera* 240.

Energy,

content, correlation analysis, body length, body weight, *Palomena prasina* 51.

Energy budget,

food conversion, production, efficiency, honey, *Apis mellifera* 873.
nutrient utilization, production, assimilation, developmental stages, *Oryzaephilus surinamensis* 173.

Energy expenditure,

flight activity, slope soaring behavior, aerodynamic properties, *Pantala flavescens* 5137.
food conversion, energy budget, production, efficiency, honey, *Apis mellifera* 873.

Energy intake,

optimization, foraging behavior, *Aconitum columbianum* flowers, *Bombus*, USA, Rocky Mts. 4345.

predators, food consumption, foraging behavior, *Macroleon quinquevittatus* 8296.

Energy metabolism,

fat reserves, allopatric populations, *Glossina pallidipes*, Kenya 6866.
stridulation, oxygen consumption, *Anurogryllus arboreus*, *Oecandrus celerinictus*, *Oecandrus quadripunctatus* 5021.

Energy output,

body size, fecundity, females, *Sceliphron assimile* 1075.
flight metabolism, enzymes, *Drosophila melanogaster* 2519.

Energy requirements,

retina, oxygen exchange, *Apis mellifera* 183.

Energy reserves,

metabolism, developmental stages, *Stomoxys calcitrans* 4159.
muscles, mitochondria, enzymatic activity, ATP pyrophosphatase, *Musca domestica* 950.

Energy sources,

flight activity, feeding behavior, *Culicoides melleus*, *Culicoides hollensis* 2009.

Energy utilization,

food consumption, assimilation, *Chrotogonus trachipterus* 8929.

Engorgement,

swarms, dispersal, workers, *Apis mellifera adansonii* 5210.

Engorged gene,

effects on compartmentation, abdomen segments, *Drosophila melanogaster* 921.

Enicocephalidae,

swarms, sex ratio, flight activity 6671

Enicospilus americanus,

genitalia, morphology, males, females 8888.

Enicospilus antefurcalis,

keys, morphology, taxonomy, Africa 3219.

Enicospilus flavoscutellatus,

genitalia, morphology, males, females 8888.

Enicospilus laqueatus,

new species, Africa 3219.

Enicospilus polemus,

new species, morphology, Africa 3219.

Enicospilus watshami,

new species, morphology, Africa 3219.

Enkephalins,

analogs, binding, opiates receptors, midgut, *Leucophaea maderae* 8911.
receptors, nervous system, *Leucophaea maderae* 2525.

Enominae,

taxonomy, morphology, keys, Canada 5654.

Enoclerus leucostei,

toxicity, insecticides, lindane, carbaryl, chlorpyrifos 4228.

Enoplognatha latimana,

new species, taxonomy, morphology 7152.

Enoplognatha ovata,

population structure, polymorphism, population genetics, Europe 4473.
surveys, crop fields, Sweden 4459.
taxonomic revision 7152.

Enoplognatha penelope,

new species, taxonomy, morphology 7152.

Ensifera,

swimming behavior, activity patterns 5154.

Euritedon leucogramma,

parasites, oviposition, *Scolytus multistriatus* 2017.

Enterobacter agglomerans,

intestinal microflora, distribution, abundance, *Schistocerca gregaria* 2012.
nitrogen-fixing bacteria, symbiosis, *Dendroctonus terebrans*, *Dendroctonus frontalis*, *Ips avulsus* 1214.

Enterobacter cloacae,

infection, *Hyalophora cecropia* pupae, immune response 5038.

Enterobium cyclocarpum,

seeds, predation, geographical variations, *Stator generalis*, Central America 5973.

Entomobryomorpha,

mesentery epithelium, regeneration, cell division 7436.

Entomofauna,

Aleocharinae, Sweden 4712.

cages, laboratory animals, *Diptera*, *Cavia porcellus* 638.

check lists, ecology, geographical distribution, British Isles 3137.

check lists, geographical distribution, *Lepidoptera*, Italy, Tuscany 3141.

community composition, leaf litter, seasonal variations, environmental factors, Brazil, Restinga de Marica 5219.

Eviphididae, Scandinavia 4709.

herbivores, check lists, *Manihot esculenta*, *Insecta* 4528.

house dust, distribution, *Pyroglyphidae*, Spain 375.

identification, keys, *Oligella*, Sweden 3977.

nests, *Micromys minutus*, *Siphonaptera* 460.

rare species, *Coleoptera*, Sweden, Halltorps Hage 4725.

samplers, leaf litter habitat 2478.

surveys, *Anisoptera*, German Dem. Rep., Greifswald 4721.

surveys, *Geometridae*, Italy 3143.

surveys, grasslands, Austria 6869.

surveys, *Lepidoptera*, Hungary 7995.

surveys, *Rhopalocera*, *Hesperiidae*, Mongolia, People's Rep. 4736.

surveys, species composition, species diversity, grasslands, Austria 6869.

Entomology,

information centers, pest control, diagnosis, USA, Minnesota 3961.

malpractice, professional consulting 3962.

pest control, farm management 686.

Entomophaga egressa,

mycotoxins, toxicity, paralysis, *Choristoneura fumiferana* 5798.

Entomophaga grylli,

pathogens, infection methodology, *Acrididae* 5627.
spores, infection methodology, *Melanoplus bivittatus*, *Melanoplus differentialis*, *Melanoplus femurrubrum* 4089.

Entomophthora,

fossils, amber, Dominican Republic 5539.

larvae infection, conidia discharges 3410.

new records, geographical distribution, pathogens, *Insecta*, Finland 5721.

pest control, biological control, *Insecta* 8532.

taxonomic revision, effects on pathogens taxonomy, fungi 830.

Entomophthora conica,

asexual reproduction, pathogens, aquatic insects, *Insecta* 1809.
parasites, aquatic environment, adaptations, asexual reproduction, *Insecta* 1009.

Entomophthora culicis,

pathogens, infestation, *Chironomidae*, USA, New York 5036.

Entomophthora egressa,

lysis, hemolymph, larvae, *Choristoneura fumiferana* 5026.
pathogens, biological control, host-parasite interactions, *Thymelicus lineola* 3420.

pathogens, larvae, *Choristoneura fumiferana* 1030.

Entomophthora erupta,

pathogens, new records, infection, hosts, *Notostira elongata*, Switzerland 6609.

Entomophthora gammaris,

infection, benomyl effects on, *Pseudoplusia includens* 2237.

Entomophthora planchoniana,

pathogens, infection, factors affecting sporulation, *Acyrtosiphon kondoi* 2646.

Entomophthora rhizospora,

asexual reproduction, pathogens, aquatic insects, *Insecta* 1809.
parasites, aquatic environment, adaptations, asexual reproduction, *Insecta* 1009.

Entomophthoraceae,

pathogens, biological control, pests, crop fields, *Apis fabae* 7760.

Entomophthoraceae,

pathogens, ecology, *Aphididae*, France 2622.

pathogens, infection, seasonal variations, *Aphididae*, France 4213.

pathogens, pest control, efficacy, *Aphis fabae* 3038.

Subject Index

- Entomoposivirus**,
antibodies, enzyme-linked immunosorbent assay, cell culture, *Amsacta moorei*.
Euxoa auxiliaris 3264
infection, pathogenesis, *Insecta* 7364
pathogens, electron microscopy (scanning), ultrastructure, *Insecta* 8143
structural protein, occlusion body protein, *Amsacta moorei*, *Euxoa auxiliaris*.
Melanoplus sanguinipes 4204.
- Entomomelasma americana**,
chemoreceptors, physiology, 4132
eggs, temperature effects, mortality, cold tolerance 2876
larvae, growth, development, survival, diets, cultivars, *Brassica campestris*.
Brassica napus 2076
larvae, host plants, *Cruciferae* 2094.
- Entrainment**,
photoperiod, locomotor activity, circadian rhythms, *Pterostichus nigrita* 6694.
- Enumeration**,
eggs, traps, oviposition, substrate specificity, methodology, *Aedes triseriatus* 860.
- Eavesdropping**,
Scorpiones venom, case surveys, Tunisia, man 8417.
toxicity, man, conferences 8706.
- Environment conditions**,
geographical variations, adaptations, sexual reproduction, *Scotia segetum* 1861.
pest control parasites, longevity, fecundity, *Bracon hebetor*, *Ephestia cautella* 2025.
- Environment management**,
environmental protection, integrated control, pest control, *Insecta* 3712.
horticulture, pest control, weed control, *Insecta* 3958.
integrated control, pest control, economics, *Insecta* 3711.
pest control, developing countries, conferences, *Insecta* 3957.
pest control, horticulture, *Insecta* 3726.
pest control, *Insecta*, USA, California 3725.
pest control, *Insecta*, USA, South Dakota 3758.
pest control, mathematical models, cost-benefit analysis, statistical analysis 1585.
pest control, planning, research programs, *Insecta* 3809.
pest control, role, pheromones, *Insecta* 3797.
pest outbreaks, pest control, *Ceratitis capitata*, USA, Florida 3745.
urban environments, pest control, horticulture, *Insecta* 3727.
weed control, *Carduus nutans*, *Rhinocylus conicus*, *Ceutorhynchidius horridus*.
USA, North Dakota 2208.
wetlands, control programs, pest control, *Aedes sollicitans*, USA, Rhode Island, Barrington 5359.
- Environmental change**,
fires, forests, effects on species composition, *Carabidae* 6840.
- Environmental changes**,
nutrition ecology, physiology, behavior, *Insecta* 4464.
paleoecology, vegetation, species composition, *Coleoptera*, USA, New York, Lockport 7127.
salt marshes, control programs, vectors, disease transmission, *Culicidae*, USA, Georgia, Glynn Co. 1437.
- Environmental degradation**,
recovery, water springs, age composition, *Gumaga nigricula*, USA, California 7812.
- Environmental hygiene**,
roads, surveys, *Diptera*, Czechoslovakia 1349.
- Environmental impact**,
biological control, weeds, *Cynara scolymus*, *Trichoscyelus horridus*.
Ceutorhynchidius trimaculatus 531.
burrowing organisms, nitrogen, sulfur, sediments, lakes, *Hexagenia* 8601.
coprophagous organisms, forage production, *Geotrupes*, *Cynodon dactylon* 1252.
grazing, nutrient release, respiration, fungi, *Onciurus subtenus* 2796.
herbivores, plant communities, *Gutierrezia sarothrae*, *Machaeranthera canescens*.
USA, New Mexico 2063.
insecticides encapsulation, apiculture, economics 7684.
introduced species, apiculture, *Apis mellifera* 6207.
pest control, nuclear polyhedrosis virus, *Bacillus thuringiensis*, *Choristoneura occidentalis*, Canada, British Columbia 4589.
pesticides, apiculture, *Apis mellifera*, Mexico 3810.
population density estimation, statistical analysis, *Insecta* 4755.
power lines, community composition, chaparral, *Arthropoda*, USA, Arizona 9183.
power plants, flushing, abundance, *Insecta*, USA, Nebraska, Niobrara R. 8611.
solar power satellites, microwave radiation, longevity, food consumption, *Apis mellifera* 7502.
- Environmental protection**,
pest control, China 712.
pest control, host specificity, adaption, *Insecta*, *Glycine max* 707.
pests, control programs, *Insecta*, USA, Arizona 1434.
- Environmental protection**,
environment management, integrated control, pest control, *Insecta* 3712.
pest control, crop protection, population level monitoring, *Insecta* 3714.
pesticide applications, pest control, integrated control, *Insecta* 3715.
- Environmental stress**,
host plants, effects on survival, reproduction, *Medicago sativa*, *Therioaphis maculata* 9168.
water flow, distribution, dispersion, rheotaxis, fresh waters, *Insecta*, Germany, Fed. Rep., Schierensee 561.
- Environmental surveys**,
collections, *Invertebrata*, Australia 8704.
collections, *Invertebrata*, Korea, Dem. People's Rep 8679.
community composition, *Insecta*, USA, Arizona, Sycamore Creek 3870.
freshwater environments, species richness, species composition, *Coleoptera*.
Hemiptera, British Isles, Norfolk Breckland 6234.
geographical distribution, occurrence, *Lonchopora lutea*, *Lonchopora furcata*.
British Isles, England 3559.
wetlands, aquatic animals, *Insecta*, Canada 3930.
- Enzymatic activity**,
acetylcholinesterase, circadian rhythms, *Periplaneta americana* 154.
acetylcholinesterase, pesticides effects on, *Apis cinquelinea* 1064.
 β -N-acetylglucosaminidase secretion, cell lines, *Culex quinquefasciatus*.
Drosophila melanogaster, *Trichoplusia ni*, *Aedes pseudoscutellans* 96.
age effects, esterase, *Callosobruchus maculatus* 4238.
alcohol dehydrogenase, allozymes, genotypes, *Drosophila melanogaster* 5443.
alcohol dehydrogenase, genetic control, population genetics, *Drosophila melanogaster* 2343.
alcohol dehydrogenase, population genetics, *Drosophila melanogaster* 1761.
alterations, gut microflora, effects on, nitrogen metabolism, *Nasutitermes*.
- Enzymatic activity, (continued)**
cutaneous, *Copitermes lacteus* 233.
amylase, gene regulation, *Drosophila virilis* 5480.
ATP pyrophosphatase, mitochondria, muscles, energy resources, *Musca domestica* 950.
biodegradation, pesticides (organophosphorus), malathion, *Tetranychus kanazawa* 3449.
brain adenylate cyclase, diapause, *Hyalophora cecropia*, *Antheraea pernyi* 124.
carbohydrate metabolism, digestive tract, *Neotermes bosei* 949.
carbonate dehydratase, diets effects on, *Hyalophora cecropia* 201.
carboxylesterase, pesticide resistance, insecticides, *Nephrotettix cincticeps*.
Japan 5042.
cell membranes, ions transport, porosome particles, *Manduca sexta* 3324.
circadian rhythms, insecticides, photore: *Acheta domesticus* 1794.
cocoon, carbohydrate metabolism, *Pieris mori* 2561.
comparative studies, *Galleria mellonella*, *Lucilia sericata*, *Eristalis roborator* 202.
corpora allata, juvenile hormones biosynthesis, *Locusta migratoria* 2590.
diets effects on, chromosomes banding, *Aphididae* 3091.
digestive enzymes, acclimation, temperature effects, *Periplaneta americana* 3372.
digestive enzymes, larvae, *Attagenus megatoma* 1762.
digestive tract, amylase, sex differences, *Gryllotalpa africana* 2547.
digestive tract, diets, *Trichoplusia* 1757.
digestive tract fluids, larvae, *Trichoplusia ni* 1749.
digestive tract, histology, *Rhinocoryza americana* 2543.
digestive tract, NADPH-cytochrome reductase, *Spodoptera eridania* 1758.
digestive tract, *Periplaneta americana* 2548.
digestive tract, symbionts, chitinase, *Neotermes bosei*, *Odontotermes distans*.
Spodoptera eridania 926.
effects on diapause termination, *Hyalophora cecropia* 3480.
effects on *Naja mossambica* *mossambica* venom toxicity, *Arthropoda* 1057.
effects on pesticide resistance, selection, *Nephrotettix cincticeps* 305.
eggs, malate dehydrogenase, *Apis mellifera* 2563.
environmental effects, genetic factors, isochromosomes, *Drosophila melanogaster* 2337.
esterase, genetic variation, environmental factors, *Drosophila simulans* 3114.
esterase 6, reproductive behavior, *Drosophila melanogaster* 1889.
fat body, calcium effects on, hormones, *Periplaneta americana* 1759.
fat body, development, *Bombus mori* 3509.
flight muscle, age effects, *Drosophila melanogaster* 1755.
flight muscle, malate dehydrogenase, malate dehydrogenase (decarboxylating).
Leptostoma decemlineata 3315.
flight muscle mitochondria, ATP pyrophosphatase, *Musca domestica* 945.
galactose, pure culture, developmental stages, *Drosophila melanogaster* 165.
genetic control, pigments, biosynthesis, *Drosophila melanogaster* 3907.
genetic factors, larvae development, *Drosophila melanogaster* 1541.
genetic variation, biochemical characteristics, natural selection, *Drosophila melanogaster* 3910.
 γ -glutamyltransferase, developmental stages, sex differences, strains, pesticide resistance, *Musca domestica* 947.
gut, salivary gland, *Haematobia irritans* 185.
hemolymph, α -trehalase induction, *Apis mellifera* 164.
hydrolysis, juvenile hormones, diapause, larvae, *Dattaria grandiosella* 4256.
infection, control, aldehyde-oxidase, histochemistry, *Protophila* 955.
infection, control, Beauveria bassiana, *Heliothis zea* 5028.
juvenile hormone esterase distribution, metabolism, *Trichoplusia ni* 206.
juvenile hormones, diapause, *Ostrinia nubilalis* 5075.
juvenile hormones, molting, starvation, *Manduca sexta* 3500.
kinetics, bioluminescence, *Pteroprya* 2616.
larvae development, alkaline aminotransferase, *Drosophila nigromelanea* 2728.
larvae, development, markers, *Trichoplusia ni* 2723.
lipid metabolism, *Periplaneta americana*, *Locusta migratoria*, *Polia adjuncta* 948.
lysozyme, *Asigmatidae* 1764.
metabolism, overwintering, temperature effects, *Eurosta solidaginis* 4255.
microtomes, comparison, strains, *Tribolium castaneum* 3326.
midgut, ion transport inhibitors effects on, *Glossina morsitans* 4994.
mitochondria, ovary, kynurenine 3-monooxygenase, *Ephestia kuehniella* 3317.
molting, chitinase, *Manduca sexta* 1766.
muscles, temperature effects, *Locusta migratoria*, *Blaberus giganteus* 2577.
mutants, *Drosophila melanogaster* 1529.
mutation, X chromosome, heterozygosity, *Drosophila virilis* 1531.
oogenesis, alkaline phosphatase, *Culex pipiens fatigans* 1886.
pesticide resistance, deltamethrin, *Myzus persicae*, *Phorodon humuli* 2657.
pesticide resistance, genetic control, *Culex pipiens fatigans* 3919.
pesticide resistance, *Nephrotettix cincticeps* 2659.
pesticide resistance, pesticides (organophosphorus), *Musca domestica* 3428.
pesticide resistance, pesticides (organophosphorus), *Musca domestica* 3439.
pesticide resistance, pyrethroid esterase, larvae, *Chrysopa carnea* 1839.
pheromones catabolism, antennae, olfaction, *Trichoplusia ni* 4168.
pheromones catabolism, molting effects on, *Trichoplusia ni* 227.
pheromones degradation, antennae, *Trichoplusia ni* 4169.
phosphoryl butoxide effects on, pesticide resistance, *Lobos* 1841.
polymorphism, population genetics, *Drosophila melanogaster* 1551.
population genetics, pesticide resistance, pirimicarb, *Aphis gossypii* 3922.
population genetics, reproductive isolation, *Phlebotomus perniciosus* perfluvii, Italy 3133.
protein biosynthesis, juvenile hormones effects on, *Insecta* 3331.
proteolytic enzymes, midgut, *Haematobia irritans* 2551.
pupae, growth, muscles, *Calliphoridae* 2718.
respiration, electron transport, mitochondria, inhibitors effects on, *Musca domestica* 953.
semenal fluid storage, females, esterase, *Drosophila melanogaster* 2716.
superoxide dismutase, life span, correlation analysis, *Drosophila melanogaster* 944.
ultrastructure, bioluminescence cells, *Photinus* 995.
variability, genetic factors, *Drosophila melanogaster* 3067.
vitamin B biosynthesis, gastrointestinal tract, larvae, *Phoracantha semipunctata* 941.
- Enzyme activity**,
digestive tract, diets, carnivores, *Pterostichus nigrita* 6544.
food utilization, *Oxyrhachis tarandus*, *Oxyrhachis hyalinipennis* 7320.
juvenile hormones, reproduction, *Diptera punctata* 6657.
late, electrophoresis, *Simulium venustum*, *Simulium venustum* 7031.
malate dehydrogenase (oxaloacetate-decarboxylating), kinetics, muscles, *Catharus* 5689.
midgut, blood meals, *Haematobia irritans*, *Stomoxys calcitrans* 5676.

Enzyme activity, (continued)

- midgut, digestion, larvae, *Rhyssocyclara americana* 6546
nutrient dynamics, soil fauna, *Isochorda Diplopora* 9368
pesticides effects on, cholinesterase, *Psephenotermes hybostoma* 5762.
- Enzyme polymorphism,**
alcohol dehydrogenase, genetic variance, environmental effects, *Drosophila melanogaster* 5492.
alcohols, alleles, loci, *Coelopa frigida* 6255.
dose-response effects, pesticide applications, larvae, *Choristoneura occidentalis* 4229.
esterase, genetic factors, *Drosophila mercatorum* pararepale 5481.
esterase, loci, alleles, *Drosophila mojavensis* 5477
heterozygosity, genotypes, distribution, *Anthonomus grandis* thurberiae.
Anthonomus grandis grandis, USA, Arizona 2339
maize dehydrogenase, relationship chromosomes polymorphism, linkage selection.
Drosophila subobscura 9394.
population genetics, *Glossina pallidipes*, Kenya 6286.
- Enzyme-linked immunosorbent assay,**
role, entomology 4092.
- Enzyme-linked immunosorbent assay,**
antibodies, entomopoxvirus, cell culture, *Amiseta moorei*, *Euxoa auxilialis* 3264
detection methodology, pathogens, *Euxoa scandens* cytoplasmic polyhedrosis virus 8007
detection, rice ragged stunt virus, vectors, *Nilaparvata lugens* 8149
detection, *Spiroplasma citri*, Insecta 6597.
identification, blood meals, *Culicidae* 3662.
methodology, vectors identification, beet curly top virus, *Circulifer tenellus* 9273.
proteins, nuclear polyhedrosis virus, cell culture, larvae, *Insecta* 1091.
- Enzymes,**
acetylcholinesterase, central nervous system, *Apis cerana indica* 2560.
activity, geographical variations, gene frequency, *Drosophila melanogaster* 6283.
activity, measuring techniques, ethylene production, fungus gardens 6215.
activity, pesticide resistance, insecticides, *Musca domestica*, Malaysia 5774.
activity, phosphorylation, 3-hydroxy-3-methylglutaryl coenzyme A reductase.
Manduca sexta 6562.
activity, temperature, glycogen phosphorylase, glycogen synthase, fat body.
Philosamia cythra 6563
alcohol dehydrogenase, aldehyde oxidase, activity, *Drosophila* 5695
aldol epoxidase, microsomes, induction, host plants, *Spodoptera frugiperda* 5712
alleles, sexual fluid, competition, sexual reproduction, *Drosophila melanogaster* 2731
arylamidases, digestion, proteins, midgut, *Rhyssocyclara americana* 6545
assays, immune serum, *Dendroctonus frontalis*, *Dendroctonus terebrans*, *Ips avulsus*, *Ips calligraphus*, *Ips grandicollis* 1769
autosomes dosage composition, trisomy, *Drosophila melanogaster* 8640
biochemical analysis, *Drosophila melanogaster* 3912
biochemical characteristics, cleavage, larvae, *Attacus megatoma* 957.
cellulose digestion, *Insecta* 4156.
centrifugation, isolation, oxidases, microsomes, *Insecta* 5623.
characterization, *Trichogramma evanescens*, *Trichogramma maidis* 2558.
chemical properties, specificity, aminopeptidase, larvae, *Attacus megatoma* 187.
chitin synthase, integument, characterization, inhibition, *Trichoplusia ni*.
Hyalophora cecropia 6559
comparative studies, genetic analysis, *Trichogramma* 197
developmental genetics, electrophoresis, body length, *Tabanus nigrovittatus* 2336
digestive tract, diets, aminopeptidase, carboxypeptidase, *Rhodnius prolixus* 1760
digestive tract, larvae, *Aethnagona soccata* 4153
digestive tract, nutrition, *Sarcophaga albiceps* 7311.
digestive tract, pH, *Neotermes boseli*, *Odonotermes distans*, hydrogen ions 1747.
digestive tract, cell membranes, *Locusta migratoria* 181.
DNA polymerase induction, nuclear polyhedrosis virus, infection, *Trichoplusia ni* 1035.
effects on survival, spermatozoa, *Apis mellifera* 4277.
electrophoresis, genetic relationship, taxonomy, *Euchloe simpliciaria*, *Euchloe cramen* 8662.
electrophoresis, pesticide resistance, pesticides (organochlorine), strains, *Anopheles stephensi* 4216
electrophoresis, phylogeny, *Bombus*, *Psithyrus* 4700
electrophoresis, phylogeny, *Pieridae*, Europe 5506.
electrophoresis, population studies, identification, africanized honeybees, *Apis mellifera* 8026.
electrophoresis, population studies, *Mansonella crassipes*, *Mansonella uniformis* 5691
electrophoresis, species identification, *Xestia* 68.
flight metabolism, energy output, *Drosophila melanogaster* 2519.
flight muscle, α , α -trehalase, *Locusta migratoria* 4959.
genetic variance, strains, population genetics, *Glossina morsitans morsitans* 7876.
 β -glucosidase, digestive tract, temperature effects, rhythms, *Halicta caerulea* 1745.
glutathione transferase, characterization, *Musca domestica* 5696.
glutathione transferase, induction, pesticides, phenobarbital, toxicity, *Musca domestica* 5783.
heterozygosity, population genetics, geographical distribution, *Drosophila* 2349.
histone acetyltransferase, DNA transcription, *Drosophila melanogaster* 5680.
hydroxymethylglutaryl-CoA reductase (NADPH), inhibition, compactin, *Manduca sexta* 6558.
immunoassays, *Drosophila melanogaster*, *Chironomus thummi* 2586.
inhibition, trifluoromethylketones, juvenile hormone esterase, *Trichoplusia ni* 5790.
isolation, characterization, dihydroneopterin triphosphate cleavage, *Drosophila melanogaster* 962.
loci, alcohol dehydrogenase, genetic variance, population genetics, *Coelopa* 6278.
loci, linkage, sex chromosomes, characterization, *Incisitermes schwarzi* 2300.
mitochondria resting, recessive mutation, *Drosophila melanogaster* 5479.
mutagenicity testing, ethanol, *Drosophila melanogaster* 1525.
oxidases, activity, microsomes, seasonal variations, *Scaptomyza aetletus*.
Scaptomyza microps 5694.
pathogens, mutants, virulence, *Pseudomonas aeruginosa*, *Galleria mellonella* 4198.
polymorphism, heterozygosity, parthenogenesis, *Drosophila mercatorum*, USA, Hawaii 3116.
polymorphism, population structure, geographical distribution, *Drosophila pseudoobscura* 3127.
proteinase, isoelectric focusing, characterization, *Insecta* 5692.
species identification, blood meals, man, *Simulium damnosum* 7326.

Enzymes, (continued)

- species identification, *Simulium*, West Africa 2568
succinate dehydrogenase, labelling cells, development, *Drosophila* 757.
systematics, taxonomy, identification, *Apis fabae* 7206.
 α , α -trehalase, isolation, purification, *Harmonia axyridis* 944.
vertical distribution, altitudes, *Elaphrus americanus*, North America, Pacific Northwest 9217
- Eobra chychtonius odumansi,**
life history, population dynamics 5883.
- Eoetenes spasmae,**
parasites, population structure, infestation distribution, *Megaderma spasma* 4387.
- Eostegana,**
taxonomic revision, new species, keys, identification, Philippines, Papua New Guinea 3989.
- Epallage latime,**
gills, morphology, ultrastructure, ontogeny, larvae 6538.
- Epanerchodus polymorphus,**
new species, taxonomy, morphology, polymorphism, USSR 6464.
- Ephedrus plagiator,**
parasitoids, life cycle, *Fraxinus excelsior* association, *Prociophilus* 9142.
- Ephemera danica,**
life cycle, diapause, feeding, streams, Sweden 3055.
life cycle, population studies, habitat, flight activity, British Isles, Lambourn R. 7013.
- Ephemera glaucops,**
new records, ecological distribution, Czechoslovakia, Latorica R. 2355.
- Ephemera deficiens,**
energetics, life history, USA, Pennsylvania, White Clay Creek 5430.
- Ephemera dorothea,**
energetics, life history, USA, Pennsylvania, White Clay Creek 5430.
- Ephemera funeralis,**
energetics, life history, USA, Pennsylvania, White Clay Creek 5430.
- Ephemera ignita,**
growth, productivity, life cycle 7012.
- Ephemera mesoleuca,**
new records, ecological distribution, Czechoslovakia, Latorica R. 2355.
- Ephemera mucronata,**
growth, nymphs, Sweden, Ricklean R. 3850.
new records, geographical distribution, Canada 1577.
- Ephemera serrata,**
energetics, life history, USA, Pennsylvania, White Clay Creek 5430.
- Ephemera subvaria,**
energetics, life history, USA, Pennsylvania, White Clay Creek 5430.
- Ephemera verisimilis,**
energetics, life history, USA, Pennsylvania, White Clay Creek 5430.
- Ephemeroptera,**
appendages, malformations, pigmentation, Sweden, Medelpad, Laxaan R. 4656.
benitols, Venezuela, Valencia L. 621.
check lists, bibliographies, taxonomy, families 7975.
food organisms, predation, lakes, *Polycelis nigra* 1487.
geographical distribution, new records, new species, Canada 1577.
growth, nymphs, Sweden, Ricklean R. 3850.
indicator species, oxygen depletion, freshwater environment, larvae, toxicity 385.
larvae, identification, morphology, North America 2498.
life history, population ecology, reviews 6233.
new records, geographical distribution, Turkey, Iran 4006.
pollution effects, sedimentation, nutrient enrichment, species richness, species diversity, streams, USA, Appalachian Mts. 7815.
seasonal variations, occurrence, emergence, USA, Virginia 3054.
surveys, ecological distribution, Czechoslovakia, Latorica R. 2355.
taxonomy, nomenclature, families 4847.
- Ephemerythus dissimilimus,**
new species, taxonomy, morphology, Zaire 6413.
- Ephestia cautella,**
biological control, pest control parasites, *Bracon hebetor* 2025.
 β -endotoxin toxicity, *Bacillus thuringiensis* 7381.
fecundity, aging, oocytes degeneration 9062.
 β -D-glucopyranosyl-O-L-tyrosine, biochemistry, development, larvae 6519.
gut histopathology, pathogens effects on 7382.
host-parasite interactions, population growth, *Bracon hebetor* 1227.
occurrence, stored products, Czechoslovakia 9294.
pest control, stored products, predators, *Blattisocia tarsalis* 2955.
pests, stored products, biological control, *Bacillus thuringiensis* 8474.
pests, stored products, chemical control, growth regulators, CGA-28772 9331.
pests, stored products, growth regulators, CGA-28772 6103.
pests, stored products, peanuts, pesticide resistance, insecticides, USA, Southeast 4223.
stored products pests, development, whey-soy drink mix 9323.
stored products pests, pesticide resistance 8205.
symbiosis, effects on fertility, *Wolbachia* 501.
temperature effects, mating behavior, fecundity, molting 1874.
- Ephestia clutella,**
eye color mutants, morphology, genetic factors 3905
occurrence, stored products, Czechoslovakia 9294.
pest control, methoprene, juvenile hormones analogs 8579.
pests, stored products, pesticide resistance, Switzerland 6921.
sterilized organisms, mating competition 8232.
- Ephestia kuehniella,**
community composition, species diversity, seasonal variations, Japan 3640.
hosts, kairomones, effects on parasites oviposition, *Nemeritis canescens* 4384
occurrence, stored products, Czechoslovakia 9294.
ovary, mitochondria, enzymatic activity, kynurenine 3-monooxygenase 3317
stored products pests, abundance, distribution, British Isles, Scotland 2264.
- Ephestia kuehniella,**
kynurenine 3-hydroxylase, activity, mitochondria, malpighian tubules, mutants 6566.
oogenesis, nurse cells development 5098.
pests, stored products, pesticide resistance, Switzerland 6921.
pigmentation, color, environmental factors, larvae 7350.
- Ephippigrinae,**
wings veins, terminology 72.
- Ephyridae,**
ecological distribution, food preferences, abundance, species diversity 622.
species lists, Italy 3997.

Subject Index

- Epicauta**, morphology, larvae, keys 5638.
taxonomy, morphology, synonymy 5562.
- Epicauta atrata**, larvae, predation, eggs, *Epicauta pestifera*, *Epicauta vittata*, *Epicauta unimaculata*, *Epicauta occidentalis* 9125.
predation, development, eggs, *Epicauta pennsylvanica* 6839.
- Epicauta brasiliensis**, taxonomy, morphology, larvae, adults, courtship 2496.
- Epicauta caustica**, taxonomy, larvae, adults, morphology, courtship 2496.
- Epicauta crucera**, taxonomy, larvae, adults, morphology, courtship 2496.
- Epicauta floydwerneri**, taxonomy, morphology, larvae, adults, courtship 2496.
- Epicauta immaculata**, eggs, predation, larvae, *Epicauta atrata* 9125.
- Epicauta occidentalis**, eggs, predation, larvae, *Epicauta atrata* 9125.
- Epicauta pennsylvanica**, courtship, aggressive behavior, dominance, males 4296.
eggs, predation, development, *Epicauta atrata* 6839.
- Epicauta pestifera**, eggs, predation, larvae, *Epicauta atrata* 9125.
- Epicauta vittata**, eggs, predation, larvae, *Epicauta atrata* 9125.
- Epicecidiophyes**, new genera, taxonomy, India 7138.
- Epicecidiophyes cleroideus**, new species, taxonomy, morphology, India 7138.
- Epicherus**, new genera, taxonomy 8743.
- Epichernes aztecus**, new species, taxonomy, morphology, Mexico 8743.
- Epicypta**, taxonomy, morphology, keys 4005.
- Epicypta helvopicta**, new species, taxonomy, morphology 4005.
- Epicypta lepida**, new species, taxonomy, morphology 4005.
- Epidemia dorcas**, population studies, range extension, Canada, Ontario 9492.
- Epidemiology**, African trypanosomiasis, Africa, conferences 1334.
African trypanosomiasis, population genetics, Glossina 1336.
African trypanosomiasis, water management effects on, vegetation patterns, geographical distribution, Glossina 1344.
Colorado tick fever, vectors, *Dermacentor anderseni* 637.
disease transmission, disease reservoirs, African trypanosomiasis, Glossina, Africa, West 1339.
disease transmission, leishmaniasis, *Lutzomyia umbratilis*, Guyana 9237.
disease transmission, tick-borne encephalitis virus, Ixodidae 9229.
disease transmission, tick-borne encephalitis virus, mathematical models, Ixodidae 9248.
disease transmission, trypanosomiasis, Glossina fuscipes fuscipes, Congo, People's Rep. 9243.
disease transmission, trypanosomiasis, Glossina, Ivory Coast 9240.
disease transmission, tularemia, *Ixodes redlichi*, USSR, Stavropol 9232.
disease transmission, vectors, *Rhipicephalus appendiculatus*, Africa 3683.
disease transmission, yellow fever virus, rain forests, *Aedes africanus*, Ivory Coast 9230.
infestation, man, Pediculidae 2916.
infestation, synergism, man, Pediculidae humanus, India, Goa 4517.
malaria, Culicidae, Plasmodium, *Spheniscus demersus* 1377.
malaria, vectors, *Anopheles darlingi*, Brazil, Amazonas 5271.
onchocerciasis, disease control, mapping, composites, Africa, Volta R. Basin 6068.
parasites transmission, Babesia lotori, Procyon lotor, *Ixodes texanus*, USA, Connecticut 1004.
pest outbreaks, population dynamics, *Metopopolium dirhodum*, *Sitobion avenae*, Triticum 4393.
plant diseases, viruses, Oryza sativa, Insecta 9275.
socio-economic aspects, man, Pediculidae humanus, Malaysia 657.
vectors, disease transmission, Culicidae 1373.
- Epidermis**, antenna, development, larvae, *Tenebrio molitor* 9043.
cell cycle, metamorphosis, *Tenebrio molitor* 1086.
cells, differentiation, juvenile hormones effects on, Lepidoptera 3519.
chitin biosynthesis, molting, *Lithobius forficatus* 5657.
chitin biosynthesis, *Phodina intercalata*, *Galleria mellonella* 2516.
molting, protein kinase, cyclic nucleotides, *Malpighia sanguinipes* 6518.
segments, gap junctions, membrane permeability, *Oncopterus fasciatus*, *Calliphora erythrocephala* 8901.
sternal gland cells, histology, *Mischocyttarus flavitarsis*, *Mischocyttarus drewseni*, *Mischocyttarus mexicanus* 5015.
- Epilachna dodecastigma**, new records, infestation, pests, Glycine max, Bangladesh 1247.
- Epilachna aspera**, pesticide resistance, malathion, population genetics 5498.
pesticide resistance, selection, malathion 2963.
- Epilachna varivestis**, air pollution effects on growth, survival 2153.
antibiotics, nikkomycin, effects on malpighian tubules, gut, osmoregulation 5713.
antibiotics, nikkomycin, effects on osmoregulation, ultrastructure, gut, malpighian tubules 4175.
biological control, parasitism, urban environment 2032.
biological control, pathogens, exotoxins, *Bacillus thuringiensis* 4598.
chemical control, pest control, crop fields, Glycine max, USA, Maryland 3795.
developmental stages, controlled conditions, rearing, life history 441.
diapause, seasonal variations, reproduction physiology 349.
feeding behavior, host plants steroids effects on, antifeedants 2077.
larvae, metamorphosis, toxicology, plant extracts, *Azadirachta indica* 3435.
larvae survival, environmental effects 6005.
pest control, biological control, *Bacillus thuringiensis* 8448.
pests, host plants susceptibility, sulfur dioxide effects on, *Phaseolus vulgaris* 6782.
population dynamics, agricultural ecosystems, Glycine max 6141.
- Epilachna varivestis**, (continued) temperature, relative humidity, environmental effects, survival, fecundity 1166.
- Epilachna varivestis**, Allium sativum extracts, effects on feeding behavior, metamorphosis 7534.
- Epilachna viginthioctopunctata**, insecticides, weathering, effects on efficacy 7712.
tryptamine synthesis 8946.
- Epilampra belli**, taxonomy, new species, morphology, Costa Rica 2471.
- Epilampra involucris**, taxonomy, new species, morphology, Costa Rica 2471.
- Epilampra rothi**, taxonomy, new species, morphology, Costa Rica 2471.
- Epilampra unistilata**, taxonomy, new species, morphology, Costa Rica 2471.
- Epinotia brunzianina**, new species, taxonomy, morphology, Hungary 7995.
- Epiperipatus isthmicola**, ecological distribution, abundance, leaf litter, Costa Rica 7578.
- Epiphyas postvittana**, abundance, pest control, crop fields, *Fragaria vesca* 3816.
crowding effects on fecundity, fertility 6011.
parasites, new species, *Goniozus mandibulatus*, *Goniozus jaciniae*, Australia 833.
- Epiphysis**, leg. functional morphology, *Lymantria dispar* 8006.
- Epipompilus insularis**, parasitoids, oviposition, feeding, *Clubiona cambridgei*, *Salticus* 6756.
- Episcada hymenaea**, aggregation behavior, activity patterns, Paraguay 7589.
- Episperches**, synonymy, *Amoca* 4057.
- Epistasis**, effects on meiosis: fitness, *Drosophila melanogaster* 2318.
inversion, fitness 2319.
- Epithecita xylochora**, synonymy, *Taygetia parvella* 4052.
- Epithelia**, neurons, sensors, electric currents, *Acheta* 2528.
- Epithelium**, cytology, instars development, *Locusta migratoria* 3465.
digestive tract, immunochemistry, histology, *Periplaneta americana* 925.
exocrine glands, ultrastructure, *Thermobia domestica* 3386.
gut, histopathology, pathogenic effects on, *Pieris rapae*, *Lymantria dispar*, *Ephestia cautella* 3382.
hindgut, histology, ultrastructure, *Neonecta glauca* 3310.
histology, ultrastructure, tubus ventralis, *Tetradontophora bielanensis* 4947.
imaginations, embryogenesis, *Manduca* 4457.
mesenteric, regeneration, cell division, *Oncometopon* 7436.
microtubules, ultrastructure, *Tylosaurus* 4117.
midgut, cells, response, blood meals, digestion, *Culex tarsalis* 6547.
midgut, L-canavanine effects on, *Manduca sexta* 4391.
midgut, morphogenesis, *Pedotontus unimaculatus* 3309.
salivary gland, membranes, calcium transport, *Phormia regina* 1798.
ultrastructure, coxal organs, *Gephromorpha* 6593.
water absorption, vesicles, *Tomocerous*, *Orechesella villosa* 3365.
wings, closure, growth models, *Drosophila* 97.
- Epitomus**, fauna, taxonomy, morphology, geographical distribution, North America 4027.
- Epitritaeus**, taxonomy, morphology, 10 new species, India 8816.
- Epitrits cucumeris**, pest control, insecticides, comparative studies 1426.
- Episotocis**, infestation, *Cordyceps unilateralis*, *Camponotus*, Brazil, Amazonas 5023.
- Epsurae melanocephala**, new records, geographical distribution, Netherlands, Voorne l. 6321.
- Equilibrium**, orientation, gravity receptors, sensilla, *Arenivaga* 2538.
- Equine infectious anemia virus**, transmission, vectors, *Aedes sollicitans*, *Psorophora columbiae* 1329.
- Equipment**, apiculture, overwintering, hives, *Apis mellifera* 6176.
cages, *Acan* 793.
cameras, night activity, *Insecta* 3247.
methodology, feeding, blood meals, *Culex* 3242.
methodology, immobilization, *Culicidae* 7255.
pesticide applications, pest control, aquatic environment, *Culicidae* 8848.
pesticide applications, pest control, *Culicidae* 2481.
photography, methodology, *Insecta*, *Araneae* 7249.
sampling, *Hypera* 8022.
seeds collection, food sources, rearing, *Oncopterus fasciatus* 8025.
- Equis nebra**, hosts, coloration, host searching behavior effects on, *Diptera* 2130.
- Eradication**, control programs, *Cochliomyia hominivorax*, USA 1459.
disease transmission, control programs, Glossina, Africa 1362.
pests, population ecology, sterile-release, *Dacus cucurbitae* 6087.
vectors, disease control, *Simulium neavei*, *Onchocerca volvulus*, Kenya 1327.
- Eragrostis curvula**, grasses, habitat preference, hibernacula, *Hippodamia convergens* 7625.
- Eremobates**, taxonomy, morphology, USA 1595.
- Eremobates arizonica**, taxonomy, morphology, USA 1595.
- Eremobates barberi**, taxonomy, morphology, USA 1595.
- Eremobates dentilis**, new species, morphology, USA 1595.
- Eremobates docolora**, new species, morphology, USA 1595.
- Eremobates pallipes**, taxonomy, morphology, USA 1595.
- Eremobates woodruffi**, new species, morphology, USA 1595.
- Eremochola ophiroides**, antibiotic, resistance, pests, *Spodoptera frugiperda* 4406.

- Eremochola ophiuroides**, (continued)
host plants, pest resistance, *Spodoptera frugiperda* 8539.
- Eremotylus**,
taxonomy, morphology 4026.
- Eretholus boguichi**,
synonymy, *Clistorapha ventosa* 4026.
- Eretmocerus cadabae**,
new species, taxonomy, morphology, Africa 4881.
- Ereynetidae**,
parasites, geographical distribution, taxonomy, birds, USA, Hawaii 795.
- Ergates faber**,
cellulose digestion, enzymes 4156.
wood borers, digestion, nutrition, feeding behavior 4344
- Eriborus terebrans**,
introduced species, population status, parasites, *Ostrinia nubilalis*, USA, Connecticut 8399.
population decline, introduced species, parasitoids, *Ostrinia nubilalis*, USA, Iowa 6008.
- Erickdus beneficus**,
new species, taxonomy, morphology, India 7207.
- Eridontomerus illiesi**,
new species, taxonomy, Germany, Fed. Rep. 37
- Erie**,
geographical distribution, *Forficula auricularia* 7890
occurrence, migrations, *Lepidoptera* 7885.
- Erigonidae**,
airborne dispersal, coastal environment, Japan, East China Sea 2101.
- Eriocampa juglandis**,
new records, geographical distribution, life cycle, USA, Alabama 9099
- Eriococcus lagerstræmiae**,
exocrine glands, waxes, ultrastructure 990
- Eriocranidae**,
taxonomic revision, morphology, Iberian Peninsula 6445
- Eriognysa pyretorum**,
chromosome number, meiosis 2430.
- Eriophora bistrata**,
life cycle, colonial characteristics, aggressive behavior, reproductive behavior 473
- Eriophyes antidotalae**,
new species, taxonomy, morphology, India 7133
- Eriophyes chibensis**,
new species, morphology, taxonomy, Japan 3170.
- Eriophyes cladophthirus**,
feeding behavior, effects on host plants leaves, *Solanum dulcamara* 1236.
- Eriophyes medicaginis**,
infestation effects on host plants growth, *Medicago sativa* 2854.
- Eriophyes prosopidis**,
infestation, fruits galls, *Prosopis cineraria*, India 3591.
- Eriophyes vridhdagiensis**,
new species, taxonomy, morphology, India 7133.
- Eriophyidae**,
galls, extraction methodology 2490.
leaf-curl association, pest control, predators, India, West Bengal 9299.
- Eriophys cladophthirus**,
pests, galls, host plants, *Solanaceae* 6910.
- Eriosema anchariottense**,
host plants preferences, *Ribes*, *Ulmus* 8356.
- Eriosema grossulariae**,
host plants preferences, *Ribes*, *Ulmus* 8356
- Eriosema lanigerum**,
host plants pest resistance, detection methodology, *Malus* 2962
- Eriosema ulmi**,
host plants preferences, *Ribes*, *Ulmus* 8356.
- Eristomena**,
new records, geographical distribution, Southeast Asia, New Guinea 3149.
- Eristalinae**,
mating behavior, habitat 8252.
- Eristalis aeneus**,
immunohistochemistry localization, pancreas proteins, brain 2523
- Eristhacus rubecula**,
parasites, *Ricinus rubeculae*, Spain 4103.
- Eriodes nigrosauratus acutus**,
new subspecies, Sicily 4066.
- Erora**,
taxonomy, North America 6329
- Erora laeta**,
autecology, taxonomy, North America 6329.
- Erora quaderma quaderma**,
ethology, autecology, geographical distribution, taxonomy, North America 6329.
- Erora quaderma sanfordi**,
ethology, autecology, geographical distribution, taxonomy, North America 6329.
- Errastus ocellaris**,
feeding, food utilization, nitrogen 6747.
- Eriwinia carotovora**,
pathogens, disease transmission, *Insecta* 8493.
pathogens, survival, vectors, *Drosophila melanogaster*, *Drosophila busckii* 1446.
- Erynia aquatica**,
pathogens, larvae, *Aedes stimulans*, USA, New York 8152.
- Erynia neopheidis**,
pathogens, infection, factors affecting sporulation, *Acyrtosiphon kondoi* 2646.
pathogens, pest control, efficacy, *Aphis fabae* 3038.
- Erynia pathogenis**,
pathogens, susceptibility, disease resistance biotypes, *Acyrtosiphon pisum* 8128.
- Erynia phytonomi**,
pathogens, occurrence, seasonal variations, *Hypera postica*, USA, Georgia 8154.
- Erythranis polyxena polyxena**,
life cycle, morphology, immature stages, food plants, *Pennisetum setosum* 8874
- Erythema**,
skin lesions, parasites infestation, rabbits, guinea-pigs, *Ixodes dammini* 8428.
- Erythemis**,
nomenclature, taxonomy, synonymy, *Leptheim*, *Mesothemis* 846.
- Erythemis simplicicollis**,
ventilatory behavior, diel variations, temperature effects on 5876
- Erythrobia**,
effects on neurosecretion, *Pieris brassicae* 4126.
- Erythrocytes**,
man, hemagglutinin, specificity, *Centruroides sculpturatus* 8438
- Erythrocytes**, (continued)
rats, 2-methyl-1,5-benzoquinone, 1-ethyl-1,4-benzoquinone, *Tribolium* secretions 6617.
- Erythromma najas**,
avoidance behavior, predation, environmental conditions 1289.
- Erythroseta B**,
effects on hemocytes, *Periplaneta americana* 5789.
- Escape behavior**,
Cicindela ocellata rectilata, USA, Texas 9118.
food organisms, webs, *Lepidoptera*, *Araneida* 454.
geotaxis, caves, *Trogophilus cavicola* 5861.
mechanical stimuli discrimination, wind, *Periplaneta americana* 2752.
phototaxis, mutants, eye pigmentation, *Drosophila melanogaster* 3096.
predators, neuroanatomy, ear, *Agrostis segetum* 5662.
walking, neurophysiology, *Periplaneta americana* 2529.
webs, *Araneae*, *Insecta* 6732.
- Escherichia coli**,
antibacterial activity, immune system, cecropin B, cecropin D, *Antheraea pernyi* 8952.
antibacterial agents, proteins, chemical composition, *Hyalophora cecropia* 203.
- Esenbeckia biclata**,
new species, taxonomy, morphology, Mexico 7965.
- Esenbeckia hirsutipalpus**,
new species, taxonomy, morphology, Mexico 7965.
- Esophageal bulb**,
development, morphology, histology 8076.
- Essential oils**,
wood, response, survival, *Coptotermes beini* 2850.
- Essigella pini**,
predator-prey interactions, abundance, seasonal variations, *Pinus taeda*, USA, South Carolina 594.
- Establishment**,
Eucelatoria armigera, capture-recapture studies, parasites, hosts, *Heliothis armigera*, infestation, India, Bangalore 2159.
- Esterase**,
activity, substrate specificity, pesticide resistance, pesticides (organophosphorus), *Tetranychus kanzawai* 7407.
enzymatic activity, genetic variance, environmental factors, *Drosophila simulans* 3114.
enzymatic activity, seminal fluid storage, females, *Drosophila melanogaster* 2716.
enzyme polymorphism, genetic factors, *Drosophila mercatorum* pararepleta 5481.
gene localization, *Aedes aegypti* 1490.
inheritance, *Anthonomus grandis* grandis 8661.
polymorphism, insecticides effects on, *Choristoneura occidentalis* 8202.
- Esterase 6**,
enzymatic activity, effects on reproductive behavior, *Drosophila melanogaster* 1889.
- Estigmene acrea**,
cell culture, infection, entomopoxvirus 3264.
larvae, cell culture, nuclear polyhedrosis virus, proteins, enzyme-linked immunosorbent assay 1091.
nuclear polyhedrosis virus, rearing, virulence, biological control 3828.
olfactory stimuli, parasites, *Eucelatoria* 4321.
pests, feeding site preferences, *Apium graveolens* 8550.
sex pheromone, chemical composition 1782.
- Estimation**,
parasitism, methodology, *Trichopoda pennipes*, *Nezara viridula* 2030.
- Estradiol**,
binding, aging methods, hosts, blood meals, *Rodentia*, *Culicidae* 6888.
- Ethanol**,
mutagenicity testing, enzymes, *Drosophila melanogaster* 1525.
tolerance, heat shock stress, ADH genotype, ethanol 7859.
- Ethidium bromide**,
culture media, effects on, development, aging, *Drosophila melanogaster* 353.
- Ethiofencarb**,
pesticides, toxicity evaluation, *Apis mellifera* 8171.
- Ethionine**,
diets, metabolism, *Agria housei* 3319.
- Ethiopia**,
ecology, abundance, distribution, habitat, 33 species, *Ixodoidea* 1309.
keys, morphology, *Batrachomorphus* 4865.
new records, geographical distribution, *Ablers pumilus* 4881.
new species, taxonomy, morphology, 5 species, *Tarsonemini* 7932.
skin diseases, case reports, scabies 5273.
- Ethiopian Region**,
taxonomy, revision, *Meranoplus*, *Dicroaspis*, *Calyptomyrmex* 1652.
taxonomy revision, *Myrmicinae* 1651.
- Ethology**,
Dasyproctus, South Africa 471.
ecology, *Coniopyrtex esbenpeterseni*, Italy 2813.
Erora laeta, *Erora quaderma sanfordi*, North America 6329.
sexual behavior, copulation, flight activity, *Eudioctria tibialis*, USA, Maryland 2733.
- Ethorimeca operculiella**,
chemoreceptors, sensilla, ovipositor 6530.
- Ethyl formate**,
pests, chemical control, *Myzus persicae*, *Frankliniella occidentalis* 2939.
- Ethyl hexanediol**,
repellents, pest control, *Diamanus montanus* 6887
- Ethyl parathion**,
insecticides, acaricides, efficacy, *Tetranychus telarius* 7794.
- 1-Ethyl-1,4-benzoquinone**,
Tribolium secretions, effects on erythrocytes, rats 6617
- 3-Ethyl-2,5-dimethylpyrazine**,
trail pheromone, venom gland, *Myrmica rubra* 6576
- Ethylene**,
effects on growth, nymphs, females longevity, *Melanoplus sanguinipes* 4264
production, fungus gardens, enzymes activity, measuring techniques, *Macrotermite* 6215
- Ethylene dibromide**,
fumigation, effects on productivity, *Trogoderma granarium* 5763.
pest control, forestry, *Dendroctonus ponderosae* 9342
- Ethylmethanesulfonate**,
effects on sex chromosomes breakage, spermatozoa, storage females, *Drosophila melanogaster* 1515.
mutagenicity, radioresistance mutants, *Drosophila melanogaster* 8650.

Subject Index

- Ediella zinkenella**,
pest control, chemical control, insecticides, *Phytomyza atricornis* 7711.
sense organs, brush-organs, morphology, thorax, antennae 2511.
- Ediology**,
infection, *Megachile rotundata*, *Ascosphaera aggregata* 5729.
- Euborellia hispanica**,
new species, taxonomy, morphology 2406
- Eucallipterus tiliae**,
population dynamics, mathematical models 8361.
prey abundance, predator-prey interactions, predatory behavior, cannibalism, *Adalia bipunctata* 8298.
- Eucalyptus**,
pest control, chemical control, Isoptera 5374.
plantations, damage, *Odontotermes gurdaspensis*, *Odontotermes obscurus*, India 7700.
wood, pest resistance, *Nasutitermes exitiosus* 4527.
- Eucalyptus blakeyi**,
damage, foliage, herbivory, Insecta, Australia 2045
- Eucalyptus camaldulensis**,
host plants, chemical composition, effects on larvae survival, *Paropsis stomaria* 7567.
- Eucalyptus marginata**,
host plants, population genetics, genetic variance, *Perthida glyptopa* 7875.
- Eucalyptus rudis**,
host plants, population genetics, genetic variance, *Perthida glyptopa* 7875.
- Eucalyptus totitana**,
host plants, population genetics, genetic variance, *Perthida glyptopa* 7875.
- Eucelatoria**,
attractants, olfactory stimuli, *Hibiscus esculentus*, *Gossypium* 4321.
dehydration, water content, effects on, olfactory perception, volatiles, chemotaxis, *Hibiscus esculentus* 432.
dehydration, water content, effects on, olfactory perception, volatiles, chemotaxis, *Hibiscus esculentus* 432.
- Eucelatoria armigera**,
capture-recapture studies, parasites, *Heliothis armigera*, establishment, infestation, India, Bangalore 2159.
- Eucelis incisus**,
food quality, food consumption, oviposition, nutrient utilization 3547.
- Eucerceris ferruginea**,
taxonomic revision, synonymy 4880.
- Eucerceris lacuosa**,
taxonomic revision, synonymy 4880.
- Eucerceris morula**,
taxonomic revision, synonymy 4880.
- Eucerceris nevadensis**,
taxonomic revision, synonymy 4880.
- Euchistus**,
taxonomic revision, morphology 5583.
- Euchloe belemia hesperidum**,
geographical distribution, Canary Is., Grand Canary 7067
- Euchloe crameri**,
population genetics, enzymes electrophoresis, genetic relationship, taxonomy, *Euchloe simpsonia* 8662.
- Euchloe hyantis**,
feeding, host plants, flowers, *Streptanthus*, USA, California 8340
- Euchloe simpsonia**,
population genetics, enzymes electrophoresis, genetic relationship, taxonomy, *Euchloe crameri* 8662.
- Euchorhippus**,
geographical distribution, ecology, France 9108.
- Eucollidae**,
systematics, phylogeny, taxonomic revision, classification status 8712
- Eucosmidae**,
taxonomy, nomenclature, types 7990
- Eucosmus**,
new species, taxonomy, morphology, Ecuador, Guatemala 7936
- Eucosma mawana**,
pest control, mating behavior disruption, synthetic sex pheromone 8584
pest control, suppression, sex pheromone, air permeation technique, suppression, mating 4585.
- Eucosma touliouana**,
chemical control, pest control, *Pinus strobus*, USA, North Carolina 2982
- Eucosmomorpha**,
association, *Metaselenia* 838
- Eucosmella**,
embryogenesis, patterning, eggs 5069
- Eudemis ptychrocha**,
new species, morphology, Madagascar 843
- Eudictoria tibialis**,
ethology, sexual behavior, copulation, flight activity, USA, Maryland 2733
- Euglena gracilis**,
lysis, hemolymph, larvae, *Choristoneura fumiferana* 5026
- Euglossa imperialis**,
feeding behavior, pollination, *Xiphidium caeruleum* 558
- Eulaisa**,
pollination, flowering phenology, *Solanum palinacanthum* 4411
- Eulophidae**,
parasitoids, incidence, *Ceratitis capitata*, *Anastrepha*, Costa Rica 2818
- Eulophus larvarum**,
parasites, venom effects on hosts development 502
- Eumenes alluaudi**,
sexual reproduction, nesting behavior, population dynamics, Seychelles, Cousin I 5903.
- Eumenes coarctatus**,
zoogeography, geographical distribution, morphology, genitalia, Finland, USSR 7893
- Eumenes coronatus**,
zoogeography, geographical distribution, morphology, genitalia, Finland, USSR 7893
- Eumenes papillatus**,
zoogeography, geographical distribution, morphology, genitalia, Finland, USSR 7893
- Eumenes pedunculatus**,
zoogeography, geographical distribution, morphology, genitalia, Finland, USSR 7893
- Eumecosoma**,
taxonomy, nomenclature 2391
- Eumecosomaculense**,
taxonomy, nomenclature 2391.
- Eumeta variegata**,
chromosomes, microtubules, localization 3079.
- Eumidea**,
new genera, taxonomy, keys 6340.
- Eumidea pallidosa**,
new species, taxonomy, morphology, USSR, Magadan Region 6340.
- Eumidea tundrosom**,
new species, taxonomy, morphology, USSR, Magadan Region 6340.
- Eumigus**,
karyotypes, heterochromatin characterization, taxonomy 3092.
- Eumigus cucullatus**,
karyotypes, heterochromatin characterization, taxonomy 3092
- Eumigus notulicus**,
karyotypes, heterochromatin characterization, taxonomy 3092.
- Eumigus punctatus**,
karyotypes, heterochromatin characterization, taxonomy 3092
- Eunostus burgeoni**,
Rhachomyces basilewskyi parasitism, new records 5990.
- Eudomynerus foraminatus**,
parental behavior, brood care, feeding, life history 1913.
sex ratio, habitat, nests 1279
- Euphrys evae**,
taxonomy, morphology, new species, Salticidae, India 801
- Eupatoriaster adenophorum**,
galls, biological control, *Procecidochares utilis*, India 3615
- Eupatorium japonicum**,
plant extracts, coumarin, eupoin, ovidices, growth inhibitors, *Drosophila melanogaster* 6621
- Eupelops longisetosus**,
new species, taxonomy, morphology, India, Darjeeling 6349.
- Eupetseria**,
taxonomy, morphology 5597.
- Euphaeidae**,
gills, morphology, ultrastructure, ontogeny, larvae 6538.
- Euphasiopteryx ochracea**,
parasitoids, phototaxis, song, *Gryllus integer*, *Gryllus veletis*, *Teleogryllus oceanicus* 7459.
mapping methodology 4924.
- Eupholidoptera chalcidarii epitroica**,
sound production, stridulation 8273
- Euphorbia maculata**,
association, Insecta, USA, Pennsylvania, USA, North Carolina 2855.
- Euphorbiaceae**,
disease transmission, vectors, *Phytonomus davidi*, *Pachybrachius bilobata* scutellus 8363
- Euphranta connexa**,
eggs larvae, morphology 8040
- Euphydryas aurinia**,
thermoregulatory behavior, body temperature 6703
- Euphydryas aurinia trilevis**,
poly-morphism, cultivation, Spain 6501
- Euphydryas desfontainii**,
new records, geographical distribution, Iberian Peninsula 7078
- Euphydryas editha**,
host preferences, oviposition, host plants 5955.
- Euphydryas phaeton**,
aggregation behavior, mortality, larvae 7612
host-parasite interactions, host searching behavior, parasitoids, *Apanteles euphydryidis* 8317
hosts, defense mechanisms, parasitoids host searching behavior, *Apanteles euphydryidis* 5932
parasitoids effects on behavior, adaptiveness 1220.
- Euphyes bimaculata**,
geographical distribution, occurrence, USA, North Carolina 8690.
- Eupithecia expallidata**,
new species, taxonomy, morphology, Finland 7220
- Euplectrus kuwanae**,
oviposition, host selection, fecundity, parasitoids 2742
parasitoids, bionomics, life history, *Argyrogramma albostrata* 1223.
- Euplectrus plathypneae**,
reproductive behavior, oviposition, population dynamics, parasites 1149
host-parasite interactions, larvae, *Anticarsia gemmatilis*, USA, Florida, Dade County 508
- Euplexia iorrbos**,
juveniles, morphology 8875
- Euploea core corinna**,
aggregation, phenology, reproduction, Australia 7581
- Eupoinin**,
plant extracts, ovidices, growth inhibitors, *Eupatorium japonicum*, *Drosophila melanogaster* 6621
- Euproctis chrysorrhoea**,
toxins, venom proteinase activity effects on skin, man 8178
venom, purification, toxicity 8185
- Euproctis lunata**,
life history, development 4323
- Euproctis subflava**,
toxins, venom proteinase activity effects on skin, man 8178
venom, purification, toxicity 8185
- Euproserpinus euterpe**,
life history, oviposition, flight activity, USA, California 7511
- Euperyx notata**,
life history, association, host plants 5886
species composition, species diversity, grasslands, Austria 6869
- Euphychia libye**,
oviposition, habitat preferences, host plants 6660
- Euphychiinae**,
oviposition, conspecifics eggs effects on 6675
- Euracila**,
evolution, phylogeny, *Curculionidae* 6292
new species, Trichoptera 4067
- Eurhadina mamata**,
new species, taxonomy, morphology, India 34

- Eurhisococcus**,
ultrastructure, glands, waxes, integument, cytology 243.
- Eurogryphus maynei**,
house dust entomofauna, distribution, altitude, Spain 575.
- Europe**,
bites, venom, medical importance, Araneae 5287.
carnivorous species, species composition, Geneva Museum, Diptera 5440.
check lists, Carabidae, species composition 9463.
collections, Natural History Museum of Geneva, species composition, Mantispinae, Platymantispinae 7883.
disease transmission, imported diseases, malaria, Anopheles 4487.
food plants, diets, Mamestra oleracea 9156.
habitat, geographical distribution, Helochares lividus, Helochares punctatus, Helochares obscurus 7170.
hybrids, sympatric populations, morphology, Anabolia furcata, Anabolia nervosa 7052.
identification keys, nymphs, Cicadelloidea, new genera, Dryocycba, Zonocycba 4935.
infestation, crop fields, Agromyzidae, Medicago sativa 8586.
new records, geographical distribution, Acanthoscelides pallidipennis 3932.
new species, taxonomy, morphology, Depressaria nemoella, Pseudatemelia eliae, Mompha complexa 7997.
new species, taxonomy, morphology, Diceranota flammata, Diceranota candelisequa 6403.
new species, taxonomy, morphology, Dilophus neglectus, taxonomic revision, Dilophus febrilis, Dilophus humeralis, Dilophus antipodalis 7182.
new species, taxonomy, morphology, Dilophus neglectus 7182.
new species, taxonomy, morphology, Thaumalea alpina, Thaumalea toscanica 2428.
nuclear polyhedrosis virus, toxicity, Mamestra brassicae 2617.
phylogeny, enzymes, electrophoresis, Peridae 5506.
population structure, polymorphism, coloration, population genetics, Enoplognatha ovata 4473.
species composition, ecological distribution, bark, Araneae 9177.
taxonomic revision, Siphona 7180.
taxonomy, morphology, Caryocolum 4887.
taxonomy, synonymy, Corixa 5576.
zoogeography, historical account, Dicerha herbis 3983.
- Europe, Alps**,
new species, taxonomy, morphology, Scatopse globulicauda 6409.
new subspecies, taxonomy, morphology, geographical distribution, Libelloides longicornis veronensis 4058.
taxonomy, synonymy, habitat, new records, geographical distribution, Leptyphantus 7899.
- Europe, Carpathian Basin**,
check lists, species composition, Symphyta 8682.
- Europe, Carpathian Mts.**,
range, geographical distribution, 7 families, Heteromera 8676.
- Europe, North**,
community structure, species composition, Bombus 6830.
- Europtum**,
marking methodology, population levels, Myrmica rubra, Myrmica scabrinodis, Lasius niger 6981.
- Eurosta solidaginis**,
temperature effects, hydration, water content, acclimation, cryogenics, overwintering, larvae 238.
- Eurosta solidaginis**,
cold tolerance, supercooling, metabolism 4144.
overwintering, metabolism, cold tolerance, larvae 4254.
overwintering, metabolism, enzymatic activity 4255.
- Eurosta solidaginis**,
cold tolerance, population-environment relations, geographical variations, divergence 2603.
- Eurybrechys tomentosa**,
natural enemies, parasites, predators 9137.
parasites, host specificity, Dryinidae 401.
- Eurycnemus crassipes**,
developmental stages, morphology, life history, geographical distribution 4928.
- Eurycoecus blanchardii**,
habitat, new records, nuts, Carya 5907.
- Eurygaster griseipes**,
brain, ablation, medial neurosecretory cells, effects on corpora allata, vitellogenesis 6590.
- Eurygaster integriceps**,
juvenile hormones effects on morphology, reproduction, population studies 6648.
juvenile hormones, effects on spermatogenesis, diapause 6646.
- Euryglossidae**,
pollen transport, digestive tract 8927.
- Eurypteropodidae**,
geographical distribution, new records, USSR 4070.
- Eurypterus tetrastichus**,
new species, taxonomy, morphology, USSR 4070.
- Eurytelma californicum**,
hemocyanin, active sites, amino acid sequence 8925.
hemocyanin, biochemical analysis, quaternary structure 3305.
- Eurytermus balachowskyi**,
mating behavior, nesting behavior, parental behavior 7484.
- Eurytermus caribaeus**,
mating behavior, nesting behavior, parental behavior 7484.
- Eurytermus magnus**,
mating behavior, nesting behavior, parental behavior 7484.
- Eurytoma**,
natural enemies, Procecidiochares utilis, India 3615.
- Eurytoma antistrophal**,
new species, taxonomy, morphology, North America 8825.
parasites, new species, host plants 4878.
- Eurytoma attiva**,
parasites, biological control, weed control, Cordia curassavica, Malaysia 2960.
- Eurytoma cuneiforma**,
parasites, new species, host plants 4878.
- Eurytoma cuneiforma**,
new species, taxonomy, morphology, North America 8825.
- Eurytoma orbicula**,
new species, taxonomy, morphology, North America 8825.
parasites, new species, host plants 4878.
- Eurytoma palustris**,
new species, taxonomy, morphology, North America 8825.
parasites, new species, host plants 4878.
- Eurytoma pini**,
parasitism, Pinus taeda 1229.
parasitoids, association, competition, Lixophaga medioris, Campoplex frustranea 9140.
- Eurytoma scabriterga**,
new species, taxonomy, morphology, North America 8825.
- Eurytoma scubriterga**,
parasites, new species, host plants 4878.
- Eurytoma strigosa**,
new species, taxonomy, morphology, North America 8825.
parasites, new species, host plants 4878.
- Euryurus**,
synonymy, Singulivorus 4911.
- Euryurus cingulatus**,
new records, geographical distribution, USA 4911.
- Euryurus leachii fraterus**,
new records, geographical distribution, USA 4911.
- Euryurus maculatus**,
new records, geographical distribution, USA 4911.
- Euryurus mississippiensis**,
morphology, taxonomy 4911.
- Eusastus**,
activity patterns, seasonal variations, USA, New Mexico 8284.
- Euscelidius variatus**,
weeds toxicity, Conium maculatum, USA, California 8353.
- Euscelis incisus**,
population dynamics, hibernation, German Dem. Rep., Thuringia 7575.
symbiosis, physiology, metabolism 6748.
- Euschistus machadus**,
new species, taxonomic revision, morphology 5583.
- Euschistus servus**,
flight activity, seasonal variations 474.
host plants, crop fields, Sorghum vulgare 2097.
overwintering behavior, ecological distribution, USA, South Carolina 455.
- Euschistus tristibus**,
overwintering behavior, ecological distribution, USA, South Carolina 455.
- Euschistus tristigmus tristigmus**,
development, morphogenesis, photoperiod effects on 7462.
- Euscorpis**,
adaptations, parental behavior, brood care, protection, environmental conditions 5108.
- Euscorpis flavicauda**,
taxonomic revision, synonymy, Acanthorhaustes brasiliensis 2392.
- Euselus distinctus**,
new species, Nigeria 1588.
- Euselus saltus**,
new species, Nigeria 1588.
- Eusimulium**,
karyotypes, taxonomy 2409.
- Euspiolus senecollis**,
carrion, community composition, succession, Costa Rica 5166.
- Eutamias minimus**,
infection, Colorado tick fever virus, disease transmission vectors, Dermacentor andersoni 3655.
- Euthima arauaji**,
new species, taxonomy, morphology, Brazil 8758.
- Euthima wendtae**,
new species, taxonomy, morphology, Peru 8758.
- Euthyrhynchus floridanus**,
excretory products, effects on predatory behavior, Pentatomidae 2898.
overwintering behavior, ecological distribution, USA, South Carolina 455.
- Eutrichopodopsis nitens**,
parasites, reproduction, Nezara viridula 6770.
parasitism, infestation, Nezara viridula, Brazil 6758.
- Eutrichota aertica**,
new species, morphology, China, People's Rep. 3197.
- Eutrichota hamaia**,
new species, morphology, China, People's Rep. 3197.
- Eutrichota quadridactyla**,
new species, morphology, China, People's Rep. 3197.
- Eutrophication**,
acidity, abundance, Chironomidae, New Zealand, Opal L. 1485.
- Eura amerinae**,
life history, host plants damage 9088.
- Euxoa**,
biogeography, habitat, geographical distribution, North America 3933.
- Euxoa auxiliaris**,
entomopoxvirus, antibodies, enzyme-linked immunosorbent assay, Amsacta moorei 3264.
entomopoxvirus, structural protein, isolation, characterization, occlusion body protein 4204.
males, attractants, chemical composition, sex pheromone 698.
- Euxoa castanea**,
new species, taxonomy, morphology, Canada, British Columbia 8839.
- Euxoa comosa**,
taxonomic revision, morphology 7996.
- Euxoa comosa altera**,
taxonomy, morphology, hybridization 7998.
- Euxoa comosa ammir**,
taxonomy, morphology, hybridization 7998.
- Euxoa comosa lutulenta**,
taxonomy, morphology, hybridization 7998.
- Euxoa comosa ontario**,
taxonomy, morphology, hybridization 7998.
- Euxoa detera**,
classification, phylogeny, North America 8839.
- Euxoa guadalupensis**,
new species, taxonomy, morphology 7996.
- Euxoa inscripta**,
new species, taxonomy, morphology, USA, Colorado 8839.
- Euxoa messoria**,
antifeedants, phenylheptatriene 8970.
- Euxoa occidentalis**,
new species, taxonomy, morphology 7996.
- Euxoa ochrogaster**,
pest control, sex pheromone, acetates, efficacy 742.

- Euxoa ochrogaster**, (continued)
synthetic sex pheromone, attractancy 7335.
- Euxoa scandens**,
flight activity, life cycle, sampling methodology 6094.
pathogens, detection methodology, enzyme-linked immunosorbent assay, cytoplasmic polyhedrosis virus 8007.
- Euxoa sibirica**,
overwintering eggs, diapause, environmental factors, temperature, Japan, Tohoku 7438.
- Euxoa tessellata**,
attractants, efficacy 3583.
- Euzophera ciceronea**,
feeding, host plants, weed control, *Artemisia absinthium* 7668.
- Evaluation**,
research programs, pest control, U.S. Department of Agriculture, USA 7923.
- Evaluation**,
insecticides, behavior, effects on pest control, *Coptotermes formosanus* 4606.
- Evathrus sodalis**,
predators, pests biological control, *Hypera postica*, *Sitona hispidula* 612.
- Evetria perangustana**,
new records, geographical distribution, Sweden 4722.
- Eviphididae**,
entomofauna, scandinavia 4709.
- Evolution**,
acoustic responses, auditory perception, predators echolocation, Chiroptera, Lepidoptera 5158.
allogenic, adaptations, Insecta 775.
association, host plants, *Bytneria aculeata*, *Phleide*, *Crematogaster* 7554
cladistic analysis, host plants, geographical distribution, Gondwanaland, *Psamathea* 2332.
classification systems, phylogeny, *Psococidae* 8669.
communication systems, effects on size distribution, *Halictidae*, *Apidae* 748.
convergence, biochemistry, *Arthropoda* 259.
ecological evaluation, association, symbiosis, *Asigmata*, reviews 6295.
ecology, aquatic animals, water temperature, reviews, *Insecta* 6235.
enzymatic activity, *Protophila*, aldehyde oxidase, histochemistry, *Protophila* 955.
ectocrine glands, defence secretions, *Lepidoptera*, *Trichoptera* 3388.
gene expression, embryos, development, *Saturidae* 3884.
genes, chorion proteins, *Bombyx mori*, *Antheraea pernyi* 4666
genes, linkage, DNA structure, *Antheraea polyphemus* 1492.
genes, nucleotide sequence, *Drosophila melanogaster* 7879.
genetic variance, pesticide resistance, dimethoate, *Musca domestica* 9422
geographical distribution, population genetics, *Drosophila*, USA, Hawaii 5502.
infectivity, parasites, *Hymenoptera* ciliell, *Tribolium confusum* 8998.
karyotypes, *Labiididae* 9407.
meiosis, *Insecta* 8668
morphology, head, *Rhynchota*, *Psocoptera*, *Thysanoptera* 3134.
morphology, panoptry complex, taxonomy, *Panoptria* 1592.
natural selection, communication, *Scolytidae* 4699.
natural selection, predation, sexual reproduction, males, *Insecta* 4698
nesting behavior, colonial characteristics, *Megachile rubi*, *Megachile texana* 6983.
nucleotide sequence, rRNA 5S, *Philosamia cynthia ricini* 8092
pesticide resistance, control programs, population genetics, *Culicidae* 5501
pesticide resistance, population genetics, models, *Insecta* 6289
phylogeny, *Curculionidae*, *Eurasia* 6292
phylogeny, clytra, *Staphylinidae* 7288
phylogeny, karyotypes, *Decticus albifrons*, *Meioptera brachyptera*, *Atlantius pachymerus* 1567.
phylogeny, taxonomy, *Colymbetes* 5504
phylogeny, taxonomy, homoplasy, *Insecta* 5505
population genetics, group selection, *Tribolium confusum* 9426
predation, oviposition, *Ammophila aberti* 2021
repeated sequence, rRNA genes, *Drosophila melanogaster* 8657
sex ratio, population genetics, *Hymenoptera* 7058
speciation, behavior effects on, *Drosophila heteroneura*, *Drosophila silvestris* 1562.
speciation, biogeography, *Iridia nyctelius* 7881
speciation, habitat preferences, *Spinodoneutes* 1563
speciation, reproductive isolation, male selection, *Drosophila melanogaster* 3929
species diversity, pollination, *Angiospermae*, *Insecta* 5200.
wings, origin, *Insecta* 774.
workers, males, social organization, *Hymenoptera* 3848
Zygaena ephialtes 4732
- Evolutionary genetics**,
Aedes 9440
kin selection, altruism, *Coleoptera* 8670
sex determination, diploidy, haploidy, *Hymenoptera* 1550
- Eyaleus**,
Dufour's gland, secretion, chemical analysis 988
- Eyaleus calceatus**,
colonies, broods, sex ratio 5422
temperature effects on life cycle, sex ratio, colonies 5078
- Eyaleus villosulus**,
population genetics, morphology, polymorphism, founder effect 4462
- Ezaloides**,
taxonomic revision, identification keys 4780
- Ezaloides tetracanthum**,
new species, taxonomy, morphology, Peru 4780
- Ezanthematus typhus**,
disease transmission, imported diseases, man, case reports, *Rhipicephalus angustus* 1332
- Exchange**,
sex chromosomes, γ RNA genes, males, *Drosophila melanogaster* 3895
- Excision**,
DNA repair, loci, mutants, *Drosophila melanogaster* 5444
- Excretion**,
fluids, blood meals, *Aedes aegypti* 2798
fluids, canavinate effects on, *Locusta migratoria migratoria* 3370
honeydew, measuring techniques, methodology, *Nilaparvata lugens* 4082
insecticides, chloroform, larvae, diapause, *Diatraea grandiosella* 3333
nitrogen, feces, detoxification, seeds, *Caryedes brasiliensis* 3436
osmoregulation, water balance, *Periplaneta americana* 5011
renal function, fluids transport, *Malpighian tubules*, reviews, *Insecta* 8931
- Excretions**,
cuticle, developmental stages, molting, *Oniscus asellus* 4273
- Excretory products**,
distribution, social behavior, sanitation, colonies, *Mallos gregalis* 2143.
domestic animals, abundance, predators, *Arthropoda*, Uganda 2896
effects on predatory behavior, *Eurythynchus flondanus*, *Pentatomidae* 2898.
oviposition deterrents, *Trichoplusia ni* 4269.
uric acid, comparative studies, *Blattodea* 928.
- Excretory systems**,
body organs, ultrastructure, *Penpatas acacioi* 4151.
- Exelastus atomosa**,
pests, crop fields, *Cajanus cajan* 4553
- Exeristes roborator**,
fatty acids metabolism, enzymatic activity 202
phospholipid composition, diets, carbohydrates 3313.
- Exhausts**,
pollution effects, reproduction, aggressive behavior, disease resistance, *Apis mellifera* 1940
spacecraft, effects on indigenous species, *Insecta*, USA, Florida 6692.
- Exitatus exitiosus**,
host preferences, population density, grasses 710.
- Exochomus concavus**,
morphology, predators, *Coccinellidae*, Congo, People's Rep 4104
- Exochomus flaviventris**,
morphology, predators, *Coccinellidae*, Congo, People's Rep 4104
- Exocrine glands**,
abdomen, defence secretions, *Rhyacophila fuscus* 3388
defence secretions, histology, physiology, *Parastizopus armaticeps* 1796
epithelium, ultrastructure, *Thermobia domestica* 3386
functional morphology, sternal gland, *Polistes fuscus*, *Polistes canadensis* 1801.
integument, sexual dimorphism, *Pentatomidae* 985
morphology, blood meals, *Rhipicephalus everti everti* 3378
secretions, trail pheromone, trail following behavior, *Polybia sericea* 4308
ultrastructure, *Dermacentor variabilis* 2614
waxes, ultrastructure, *Encococcus lagerstraeae* 990
- Exocytosis**,
secretions, granules, cells, endocrine function, midgut, *Periplaneta americana* 8077
- Exorista japonica**,
natural enemies, *Hyphantria cunea* 610.
- Exoristobia philippinensis**,
parasitoids, hosts 5933
- Exoskeleton**,
thorax morphology, larvae, *Manduca sexta* 8064
- Exotic species**,
morphology, *Lepidoptera*, USA, New Mexico 5529.
- Exotoxins**,
feeding deterrents, *Bacillus thuringiensis*, *Agrotis ipsilon*, *Ostrinia nubilalis*, *Musca domestica* 3779.
pest control, pathogens, *Bacillus thuringiensis*, *Epilachna varivestis* 4598.
susceptibility, *Bacillus thuringiensis*, *Leptinotarsa decemlineata* 5734
toxicity, *Bacillus thuringiensis*, *Agrotis ipsilon*, *Spodoptera frugiperda*, *Ostrinia nubilalis* 5051
toxicity, effects on, skeletal muscles, *Centruroides suffusus suffusus* 5055
- Experiences**,
conspecifics effects on maze learning, *Isopiera* 1165.
feeding, effects on orientation, nests, *Paravespa vulgaris* 6695
oviposition, discrimination, hosts, *Pieris rapae crucivara*, *Apanetes glomeratus* 7497
- Experimental infection**,
dengue virus detection, immunofluorescence, *Toxorhynchites splendens* 8167.
disease resistance, *Ornithodoros moubata*, *Rickettsia akari* 8594
disease transmission, tick-borne encephalitis virus, *Ixodes persulcatus* 9227
Ganjam virus, *Culex*, *Aedes*, *Haemaphysalis* 7385
mortality, *Tonulopsis apicola*, *Apis mellifera* 1808
nuclear polyhedrosis virus, effects on metabolism, *Bombyx mori* 284
Rickettsia, *Ornithodoros moubata*, pathogenicity, guinea-pigs 9234
- Exploratory behavior**,
host selection, parasitoids, predator-prey interactions, *Anisopteromachus calandrea*, *Callosobruchus spinulosus* 4367
maxillary palps, movements, *Gryllus bimaculatus* 8055
parasites, silk, exposure time, diurnal variations, *Apanetes melanocetus*, *Lymantia dispar* 1219
- Explosives**,
pest control, methodology, *Pinus contorta*, *Dendroctonus ponderosae* 5303.
- Exposure**,
host plants precursors, photomorphogenesis, *Ips paraconfusus* 1784.
- Exskeleton**,
anatomy, methodology, microscopy, *Apis mellifera* 8056
- Extatosoma tiaratum**,
eggs, shells, minerals 6633
gynandromorphism, morphology 7054
- External stimuli**,
environmental factors, coloration, pupae, *Papilio protenor demetrius* 2602
oviposition rhythms, photoperiods, *Drosophila melanogaster* 4262
role, mating behavior, courtship, *Chrysopa perla* 4301
- Extinction**,
learning behavior, punishment, reinforcement, response acquisition, *Melipona quadrifasciata anthidia* 6588
population decline, *Maculinea* area, British Isles 2117.
population decline, parasitoids effects on, *Xanthoteras politum*, USA, New Jersey 2034.
potentiation, overshadowing, odor, color, *Apis mellifera* 5874
sympatric populations, competition, land use effects on, *Pieris oleracea*, *Pieris rapae*, USA 1286
- Extractants**,
Pinus ponderosa, effects on feeding behavior, *Ips paraconfusus* 2007.
- Extraction**,
methodology, galls, *Eriophyes* 2490
rearing methodology, media (culture), pupae, *Diatraea grandiosella* 4087
salivary gland, methodology, *Simulidae* 67
soil fauna, methodology, *Diabrotica* 2488.
venom, methodology, *Apis mellifera* 2180
- Extracts**,
antifeedants, pest control, *Anethum sowa* 7346
Capsicum frutescens, toxicity, *Stipophilus oryzae* 1065.
effects on survival, intraspecific relationships, *Apis mellifera* 1947

Extracts, (continued)

efficacy, pest control, *Acorus gramineus*, *Solanum xanthocarpum*, *Swertia churyuta*, *Bagrada cruciferarum* 7682
 females, attractants, reproductive behavior, *Lucilia cupina* 215
 hardwoods, effects on survival, antifedants, *Reticulitermes flavipes* 3808.
 host plants, effects on feeding behavior, *Dendroctonus frontalis*, *Pinus taeda* 1961

host plants, growth retardation, *Lycopodium esculentum*, *Heliothis zea* 2083.
 queens sex pheromone, attractancy, workers, *Apis mellifera ligustica* 8272
 wood, effects on survival, *Reticulitermes flavipes*, *Coptotermes formosanus* 1810.

Exudates,
 host plants, feeding, *Saissetia*, *Pityrogramma*, Germany, Fed. Rep., Darmstadt 1207.

Eye

acetylcholinesterase, photoreceptors, histochemistry, *Apis mellifica* 3299.
 cells, cytology, *Calliphora erythrocephala* 3288
 color, mutants, mating behavior, *Drosophila melanogaster* 1135
 color, mutants, morphology, genetic factors, *Plodia interpunctella*, *Ephestia elutella* 3905
 color, mutation, *Apis mellifera* 1524.
 color mutation, genetic control failure, *Lucilia cupina* 2348
 eye disc, growth, cells, larvae, *Drosophila melanogaster* 3292
 fluorescence, mutants, genetic analysis, *Ceratitis capitata* 1532
 histology, physiology, comparative studies, *Apis mellifera*, *Bombus hortorum* 904.
 light adaptations, electroretinograms, *Romalea microptera* 148
 mutants, pigmentation, phototaxis, *Drosophila melanogaster* 3096
 neurochemistry, calcium, magnesium, sensitivity, illumination, *Menemerus confusus* 5667
 neurosecretion cells, *Hersilia savignyi* Lucas 2527

photoreceptors, rhodomeris, ultrastructure, spatial distribution, *Musca domestica* 4968

pigmentation, mutation, inheritance, *Oryzaephilus mercator* 5470
 pigments, drosopterin, biosynthesis, biochemical analysis, *Drosophila melanogaster* 3325

pigments, isolation methodology, *Insecta* 2482
 ultrastructure, dark culture, effects on, *Drosophila melanogaster* 131
 ultrastructure, homology, *Hydraphantes ruber* 86
 ultrastructure, ommatidia, visual perception, light, polarization, *Calliphora erythrocephala* 4967

vision, bioluminescence, *Photinus pyralis* 132

Eye lens

Compound eyes, optical properties, *Scarabaeidae* 134

Eyes,
 color, mutants, heritability, *Culex pipiens pallens* 4685

Erythrovenia,
 morphology, ultrastructure 7279.

Erythrocnemis alacris,
 instars, oviposition, digestive tract functional morphology 461

Erythrocnemis capitata,
 instars 461
Erythrocnemis plorans,
 instars 461

Fagus,
 beech bark disease incidence, soils (calcareous), *Cryptococcus fagisuga* 2964.

Fagus grandifolia,
Cryptococcus fagisuga infection, association, *Nectria galligena*, USA, West Virginia, Monongahela National Forest 9276.

Falagra,
 surveys, geographical distribution, Mongolia, People's Rep. 3934.

Falsamblesia ibiyara,
 new species, taxonomy, morphology, Brazil 6357.

Falsamblesia unguicularis,
 bionomics, comparison, *Falsamblesia ibiyara*, Brazil 6357

Families,
 check lists, bibliographies, taxonomy, *Ephemeroptera* 7975.

cladistic analysis, classification, phylogeny, *Julida* 9441.

keys, taxonomy, morphology, *Geometridae*, Canada 5654.

nomenclature, taxonomy, *Ephemeroptera* 4847.

ventral nerve cord anatomy, comparison, *Apoecrita* 8917.

Faunis cunicularia,
 chemotaxis, *Allium cepa*, microorganisms, volatiles, synergism 230.
 pest control, Germany, Fed. Rep. 632.

Fannia stigi,
 new species, taxonomy, morphology, Scandinavia 7971.

Farnesol,
 effects on vitellogenesis, *Labidura riparia* 1118.

Farrinocytis tribolii,
 pathogens, effects on hosts growth, development, *Tribolium castaneum* 1027.

Farm management,
 entomology, pest control 686.

pest control, defoliation, insecticides, *Insecta*, *Nematoda*, population density, monitoring, *Phaeosinus vulgaris* 709.

Farms,
 poultry, pest control, attractants, efficiency, *Diptera* 4639.

(E)- β -Farnesene,
 alarm pheromone, avoidance behavior, host plants, pest control, *Aphididae* 7337
 alarm pheromone, effects on host searching behavior, landing behavior, *Myzus persicae* 7343.

Farnesol

effects on vitellogenesis, *Labidura riparia* 5079.

juvenile hormones mimics, effects on oogenesis, *Labidura riparia* 1116

Fat body,
 binding, heterogeneity, juvenile hormones, *Blattodea* 209.
 biochemical analysis, biosynthesis, respiratory pigments, *Blaberus discoidalis* 1774.

biosynthesis, lipophorin, lipids, vitellogenin, *Locusta migratoria* 3330.

cells, cell culture methodology, *Manestra brassicae* 876.

cells, organelles, larvae, *Protophormia terreanova* 102.

cytochrome degradation, synthesis, mitochondria, diapause, *Heliothis zea* 5818.

development, enzymatic activity, *Bombyx mori* 3509.

development, sensitivity, photoperiod, diapause, *Menemepilachna*

virginitocapunctata 7456.

DNA biosynthesis, polyploidization, growth, metamorphosis, *Schistocerca gregaria*

Fat body, (continued)

7452
 DNA biosynthesis, RNA biosynthesis, *Coccinella septempunctata* 935.
 ecdysterone, effects on gene expression, LSP-2 gene, *Drosophila melanogaster* 5482

enzymatic activity, calcium effects on, hormones, *Periplaneta americana* 1759.
 giant nephrocytes, ultrastructure, *Bombyx mori* 3267.

golgi apparatus, phosphorus localization, spectroscopy (photoelectron), *Insecta* 8937.

infection, pathology, *Amblyospora californica*, larvae, *Culex tarsalis* 283.
 juvenile hormones, polyploidy, vitellogenesis, protein biosynthesis, *Locusta migratoria* 1775.

juvenile hormones, stimulation vitellogenin genes transcription, *Locusta migratoria* 6569.

lipid biosynthesis, hormones effects on, *Glossina morsitans* 1751.

lipid biosynthesis, migration, *Chortocetes terminifera* 2557.

lipid biosynthesis, *Tratoma infestans* 191

metabolism, *Periplaneta americana* 4998.

molt, ultrastructure, physiology, *Hogystatura tulbergi* 4281.

oogenesis, proteins, vitellogenin, *Diptera punctata* 1884

origin, differentiation, *Protophormia terreanova* 342.

ovary, development, prococene II effects on, *Oxya japonica* 1115.

pheromones biosynthesis localization, *Anthonomus grandis* 4167.

proline synthesis, lipid metabolism, hormones, *Glossina morsitans* 8089.

protein biosynthesis, tunicamycin effects on, *Galleria mellonella* 6556.

protein biosynthesis, vitellogenin, *Drosophila melanogaster* 3506.

protein biosynthesis, vitellogenin, *Locusta migratoria* 8942.

protein biosynthesis, vitellogenin, molting hormones, 20-hydroxy-ecdysone, males, *Sarcophaga bullata* 3367.

proteins storage, metamorphosis, *Sarcophaga peregrina* 3318.

mRNA, protein biosynthesis, plasma proteins, *Bombyx mori* 3913.

separation techniques, methodology, *Glossina morsitans* 61.

sequestering, hemolymph proteins, *Calpodex ethiuis* 6557.

storage protein biosynthesis, *Galleria mellonella* 6572.

temperature, glycogen phosphorylase, glycogen synthesis, activity, *Philosamia*

cynthia 6563.

tryptophan pyruvate activity, *Schistocerca gregaria* 8938.

ultrastructure, molting, juvenile hormones, vitellogenesis, *Sarcophaga bullata*

2721.

ultrastructure, sexual dimorphism, *Isoptera* 4161.

uptake, storage protein biosynthesis, juvenile hormones control, *Bombyx mori*

2726.

vitellogenin, vitellin, biosynthesis, *Calliphora erythrocephala* 6550.

yolk proteins, gene expression, 20-hydroxyecdysone effects on, *Drosophila melanogaster* 6243.

Fat metabolism,
 seasonal variations, dormancy, *Scymnoides lividigaster*, *Leptotheca galbula*, Australia 3327.

water balance, body weight, molting, *Nauphoeta cinerea* 7324.

Fatty acid composition,
 diets, effects on, *Oncopeltus fasciatus* 6586.

diets lipids, developmental stages, *Pectinophora gossypiella* 167.

lipids, *Tratoma infestans* 192.

seasonal variations, biochemical analysis, *Hyperodes bonariensis* 175.

Fatty acids,
 biochemical composition, eggs, developmental stages, *Spodoptera littoralis* 1082.

chemical composition, mandibular glands secretions, *Apis mellifera* 242.

head, workers, age, *Apis mellifera* 8090.

host plants, effects on growth, *Pectinophora gossypiella*, *Heliothis zea*,

Heliothis virescens 4414.

lipid composition, royal jelly, *Apis mellifera* 3390.

metabolism, comparative studies, *Galleria mellonella*, *Lucilia sericata*, *Exeristes*

robustior 202.

repellents, oviposition, *Culicidae* 5859.

toxicity, lipid metabolism, lipolysis, *Reticulitermes flavipes* 6568.

Fatty-acid synthetase,
 complex, biochemical analysis, *Ceratitis capitata* 940.

Fauna,
 Coleoptera, species composition, crop fields, Avena, Finland 2220.

Diluteriomus, Epitomis, North America 4027.

studies, taxonomy, Noctuidae, Germany, Dem. Rep. 1573.

surveys, salt marshes, Coleoptera, USA, Florida 3622.

systematics, Limnidae, France 4728.

Feaella,
 new species, taxonomy, morphology, Kenya 4768.

Feces,
 attractancy, *Reptilia*, *Amphibia*, *Scarabaeidae*, Panama 5134.

excretion, nitrogen, detoxification, seeds, *Caryedes brasiliensis* 3436.

habitat, *Tyto alba*, *Lipocelis kiddeni*, *Lipocelis corrodens*, *Lipocelis*

omphralis, *Lipocelis rufus*, *Leptinotus reticulatus*, *Trogium pulsatiorum*,

Lachesilla pedicularia, *Yugoslavia* 4436.

livestock, abundance, seasonal variations, *Histeridae*, USA, Texas 4481.

pheromones, aggregation, sympatric populations, *Tipula* caudex, *Tipula simplex*,

USA, California 6721.

Feundity,
 abundance, population growth, races, *Aphis gossypii* 1306.

adults, pupae mass effects on, *Aedes aegypti* 5895.

age effects, emergence, adults, *Monochamus alternatus* 2905.

aging, *Plodia interpunctella*, *Ephestia cautella* 9062.

biometrics, sexual reproduction, *Anopheles darlingi*, Brazil 7527.

biotypes, development, effects on host plants, *Nilaparvata lugens* 1288.

body size, energy output, females, *Sceliphron assimile* 1075.

body size, temperature, salinity effects on, *Aedes dorsalis* 8235.

body weight, maternal behavior, nest building, *Sceliphron assimile* 1905.

Boophilus microplus, parasites, *Babesia bovis* 2038.

breeding success, *Adoxophyes* 1851.

coexistence, *Ephemera*, USA, Pennsylvania, White Clay Creek 5430

correlation, segregation chromosomes, *Drosophila melanogaster* 3090.

crowding effects on, larvae, *Epiphyas postvittana* 6011.

crowding, mating behavior, effects on, *Cylas formicarius elegantulus* 1876.

dark tolerance, *Drosophila simulans*, *Drosophila melanogaster* 8235.

development, host plants, artificial diets, *Spodoptera frugiperda* 6169.

development, predator-prey interactions, oviposition, *Galerandrom longipilis*,

Nooseiulus fallax, *Phytoseiulus macropilis*, *Proprioseius tamperillus*,

Tetranychus urticae 362.

development, survival, temperature effects, *Sturmlopsis inferens* 2683.

Fecundity, (continued)

- development, *Zea mays* grain, *Sitotroga cerealealis* 6102.
diets, *Diatraea grandiosella* 1748.
diets, effects on, *Cydia pomonella* 2765.
diets effects on, *Cyphoderus javanus* 5090.
diets effects on, *Diaphana nitidula* 1890.
diets effects on, nutrient sources, proteins, sucrose, *Anthonomus grandis* grandis 876.
diets effects on, *Pectinophora gossypiella* 7459.
diets effects on, rutin, *Achea domestica* 3484.
diets, pest control, processed foods, *Tribolium confusum* 8078.
diazinuron effects on, *Oryza japonica* 5767.
egg production, blood meals, body weight, *Ixodes ricinus*, Ireland 1126.
egg production, fertility, reproductive behavior, *Dendroctonus frontalis* 1150.
eggs size, crowding effects on, age effects, *Schistocerca gregaria* 4276.
emergence, Chilo suppressalis, Japan 1909.
environmental effects, temperature, relative humidity, *Epilachna varivestis* 1166.
epistatic effects on, fitness, *Drosophila melanogaster* 2318.
feeding, life cycle, *Clemensia albata*, *Protoparce viridis* 7509.
feeding, temperature, predation, mathematical models, *Adalia bipunctata* 6018.
females body size effects on, *Anopheles messeae* 324.
females, carboxin effects on, *Unaspis eunymii* 2651.
fertility, diets, *Athenga soccata* 4434.
fertility, methoprene effects on, *Cydia pomonella* 8236.
fitness components, *Phascolus vulgaris* 770.
flight activity, *Bactra verutana* 6821.
food availability, development, *Phytoseiulus persimilis*, *Amblyseius degenerans* 1870.
food organisms effects on, cultivars, *Phiorrhiza operculata*, *Solanum tuberosum* 539.
food plants effects on, Cucurbitaceae, *Aulophora foveicollis*, *Aulophora atripennis* 9167.
food plants effects on, *Pterobelaus darlingensis*, *Pterobelaus alternatus* 7510.
food plants, infection, potato leaf roll virus, *Leptinotarsa decemlineata* 7440.
fungicides effects on, pest control, phosphine, *Tribolium castaneum* 7692.
geographical distribution strains, *Simulium decorum* 2793.
growth, survival, *Acyrtosiphon kondoi*, *Medicago sativa* 6944.
host plants, *Otiorythia sulcata* 5340.
infection effects on, pathogens, *Microsporidia*, *Aedes aegypti* 8129.
intraspecific relationships, superparasitism, *Trichogramma* 1226.
larvae food sources competition effects on, *Musca autumnalis* 1274.
life cycle, environmental effects, *Bruchidius affinis* 6653.
life cycle, life history, *Phytomyza chalcographa* 6715.
life cycle, parasites, *Goniozus emigrans*, *Parasitoidia transiella* 6754.
life cycle, *Perlesta placida*, USA, Texas 3859.
life history, *Cydia pythia* 434.
life history, *Empoasca dolichis*, Nigeria 2772.
life history, *Gastrophysa polygoni*, British Isles, England 4334.
life history, genetics, *Drosophila melanogaster* 3117.
life history, limiting factors, food availability, *Tenodora aridifolia* sinensis 2906.
life history, parasites, *Aleochara moesta*, *Musca domestica* 6775.
life history, predation, oviposition, *Toxorhynchites splendens* 1188.
life history, reproduction, *Pectinophora scutigeri* 3549.
longevity, cultivars pest resistance, *Sorghum*, *Athenga soccata* 4565.
longevity, development, culture, *Toxorhynchites ambrosinus* 439.
longevity, diets, *Diaprepes abbreviatus* 5147.
longevity, food organisms, diets effects on, *Amblyseius gossipi* 7603.
longevity, host plants effects on, *Helidius undalis* 6806.
longevity, life history, *Philonthus longicornis* 6726.
longevity, life history, *Philonthus musor* 6708.
longevity, life history, *Philonthus turbidus* 6709.
longevity, reproductive behavior, *Nezara viridula* 6629.
longevity, temperature effects, parasitoids, *Patasson laevis* 2817.
magnetic fields effects on, continuous culture, *Hesperocermes* 7493.
mass rearing, egg production, *Dacus cucurbitae*, Japan 1850.
mating behavior, oviposition, *Hydrolytus bajulus* 3527.
mating behavior, radiation effects on, males, *Culex tarsalis* 1125.
mating delay, *Spodoptera littoralis* 8823.
nutrients, media (culture), rearing, *Corycia cephalonica* 7452.
oviposition, habitat, *Toxorhynchites ambrosinus*, USA, Indiana 5857.
oviposition, host selection, parasitoids, *Euplectrus kuwanae* 2742.
parasites, hosts population density effects on, *Aphelinus semiflavus*.
Acyrtosiphon pisum 8318.
parasites, hosts population density effects on, *Trichogramma pretiosum* 4373.
parasites, mass rearing, *Pales pavidus*, *Galleria mellonella* 510.
parasitoids, host searching behavior, oviposition, *Ascoagarus reticulatus* 7482.
parasitoids, *Telenomus podisi*, *Trissolcus euschisti* 8322.
pathogens infection effects on, *Nosema carpocapsae*, *Cydia pomonella* 2632.
pathogens, infection, nuclear polyhedrosis virus, *Pseudophasia includens* 7390.
pest control parasites, environment conditions, *Bracon hebetor*, *Ephestia cautella* 2025.
pesticide resistance, DDT, *Culex quinquefasciatus* 5770.
pesticide resistance effects on, strains, *Musca domestica* 8197.
pesticide resistance, malathion, *Sitophilus oryzae* 5043.
pests, host plants, winter, *Myzus persicae*, India, Simla 7746.
population density effects on, *Drosophila melanogaster* 2770.
population density, manure availability, *Phytoseiulus gazella* 5997.
population density, models, *Sitophilus oryzae* 1282.
population dynamics, gynoparae, life cycle, *Rhopalosiphum padi* 2681.
population dynamics, gynoparae, *Rhopalosiphum padi*, Finland 5226.
population dynamics, *Trypoxylon palliditarsis*, Trinidad 2892.
population genetics, subdivision, *Tribolium castaneum* 3603.
population growth, *Lymnaea dispar*, North America 1972.
population growth, pollen diets effects on, *Amblyseius hibisci* 7572.
population levels, insecticides effects on, *Teranthyus turkestanus* 2893.
population structure, kitchens, houses, *Blattella germanica*, USA, North Carolina 6032.
population studies, biotypes, population genetics, *Nilaparvata lugens* 3604.
precoec effects on, *Cimex lectularius* 374.
predators, population density, *Phytoseiulus persimilis*, *Amblyseius degenerans* 4468.
quens chemical extracts effects on, quens, *Tenebrio molitor* 8236.
rearing, *Onchocera voluvis* quens, *Simulium damnosum* 5058.
reproduction, temperature effects on, *Chelindia vittiger* 6644.
reproductive behavior, oviposition, host plants, *Athenga soccata* 5842.

Fecundity, (continued)

- reproductive effect, parasitoids, *Xanthopimpla stemmator*, *Chilo partellus* 8315.
selection, *Drosophila melanogaster* 3120.
sex ratio, temperature effects, *Chrysomphalus ficus* 1883.
sexual reproduction, environmental factors, *Neodipron scirifer* 7466.
sexual reproduction, oviposition, egg production, sex ratio, *Lagria villosa* 6630.
sexual reproduction, 20-hydroxyecdysone effects on, *Achea domestica*, *Drosophila melanogaster* 5820.
sigma virus infection effects on, *Drosophila melanogaster* 3425.
survival, cold tolerance, genetic drift, *Drosophila melanogaster* 3926.
survival, host plants chemical composition effects on, *Brevicoryne brassicae* 7559.
temperature effects, *Dermestes maculatus* 1871.
temperature effects, *Ephestia cautella*, *Plodia interpunctella* 1874.
temperature effects on, *Bruchidia* 8234.
temperature effects on development, *Spodoptera littoralis* 7460.
temperature effects, *Pterobelaus darlingensis*, *Pterobelaus alternatus* 3545.
temperature effects, storage, *Amblyomma americanum* 1129.
temperature, humidity, stored products, *Tricium*, *Sitophilus oryzae* 6977.
temperature, relative humidity, effects on, *Pandua peregrina* 7504.
Feedback, control, leg. muscles, *Carassius auratus* 889.
control, leg. muscles, electrophysiological recording, *Carassius auratus* 890.
Feedback inhibition, vitellogenesis, ovary, *Aedes aegypti*, *Aedes atriopalis* 327.
Feeding, adaptations, predatory behavior types, ecological distribution, *Carabidae*, Italy 4446.
adjuvants, Coax, Gustaf, biological control, *Heliothis* 9274.
adjuvants, pest control, biological control, *Heliothis* 4605.
adults, pest resistance, cultivars, *Lassorhynchus oryzae*, *Oryza sativa* 6129.
aluminum, *Ctenolepisma vernalis* 5916.
association, wood litter fall, *Reticulitermes flavipes*, *Reticulitermes virginicus*, USA, Southeast 8598.
atmospheric conditions effects on, nitrogen, carbon dioxide, *Amyeloid transiella*, *Plodia interpunctella* 8278.
BHC effects on, *Rodnius prolixus* 9056.
bioassays, chemical stimuli, host plants, host preferences, *Pissodes strobi* 5162.
blood meals, diapause, overwintering, *Culex tarsalis* 3570.
blood meals, mating effects on, *Glossina* annalis 8239.
blood meals, methodology, equipment, *Culex tarsalis* 4242.
blood sucking, attraction sensilla, *Diptera*, *Phthiraptera* 2532.
brood care, life history, *Nocistocera adrianae*, *Eudryinus foraminatus* 1913.
capture-recapture studies, autogeny, blood meals, oviposition, *Culex tarsalis* 6745.
clothing, pest control, *Attagus megatoma*, *Anthrenus flavipes*, *Tineola bisselliella* 1796.
competition, Formicidae, Turkey 6744.
corpora allata activity, precocious II effects on, *Dysdercus cingulatus* 9052.
crops, damage, *Phaeosiphium pluviale*, *Diatraea baletta*, *Cerostoma facialis* 4609.
damage, crops, *Carva illinoensis*, *Monelliopsis nigropunctata*, *Monella caryella*, *Melanocallis caryaeolae* 9345.
damage, crops, *Diatraea baletta*, *Cerostoma facialis* 9347.
damage larvae pests, *Ostrinia nubilalis*, *Phaeosiphium pluviale* 8571.
damage leaves, *Oligonychus punctus*, *Persea americana* 6165.
damage, pests, *Musca domestica*, *Solanum tuberosum* 8543.
damage pests, *Uebalus pugnax*, *Sorghum* 8506.
damage regeneration, host plants, *Nymphodes cristatus*, *Insecta* 6801.
deterants, plant extracts, *Trifolium repens*, *Heteronychia asper* 6912.
deterants, exotoxins, *Bacillus thuringiensis*, *Agrotis ipsilon*, *Ostrinia nubilalis*, *Musca domestica* 5779.
deterants, host plants, pest resistance, *Sorghum bicolor*, *Schizaphis graminum* 5294.
deterants, pests, oils, *Anthonomus grandis* 2252.
deterants, plant extracts, *Thuja plicata*, *Pissodes strobi*, *Altea ambiens* 4352.
diets, fertility, *Culex simulans*, USSR, Abakan 9197.
disease transmission, pathogens, *Anthonomus malvacearum*, *Earias* 7380.
dosage methodology, *Apis mellifera* 66.
drought, effects on, yield, *Sorghum*, *Schizaphis graminum* 727.
ecological distribution, habitat, *Tityus trivittatus fasciatus*, Brazil 6838.
ecology, food preferences, algae, *Scutella picea* 3869.
effects on accessory gland maturation, *Glossina morsitans* 354.
effects on, *Festuca*, *Forcipata* loca 2069.
effects on growth, damage, *Carya illinoensis*, *Monelliopsis nigropunctata*, *Monella caryella*, *Melanocallis caryaeolae* 4587.
effects on put activity, hemolymph, *Stomoxys calcitrans* 178.
effects on host plants anthesis, *Schizaphis graminum* 2054.
effects on host plants growth, *Monella caryella*, *Carya pecan* 2091.
effects on host plants, weed control, *Notaris bimaculatus*, *Agropyron repens* 1250.
effects on, *Lomera*, *Hyadaphis tataricae*, *Canada*, Quebec 2043.
energy metabolism, allopatric populations, *Glossina pallidipes*, *Gambia* 6866.
environmental effects, humidity, temperature, *Cryptomyces* 5128.
environmental impact, injuries, seeds, cones, *Leptoglossus corollae*, *Pinus taeda* 1238.
experience, effects on orientation, nests, *Paravespa vulgaris* 6695.
fecundity, life cycle, *Clemensia albata*, *Protoparce viridis* 7509.
flowers, pollination, *Lepos vittata*, Netherlands 2061.
foliage age, *Arachis hypogaea*, effects on, *Spodoptera frugiperda* 382.
food conversion, leaves, host plants, *Pieris brassicae* 6746.
food conversion, pests, forests, *Glyptus hirsutus* 7696.
food preferences, *Chrysomela scripta*, *Papilio* 8305.
food utilization, nitrogen, *Homoptera* 6747.
growth, development, fecundity, predation, mathematical models, *Adalia bipunctata* 6018.
growth, food plants, *Spodoptera littoralis*, Ghana 2849.
growth, stress, *Ephestia dactyla*, *Siphonurus danstalis*, Sweden 3055.
growth, temperature effects on, *Coleotes aeneus* 5715.
host plants, *Berytidae* 8355.
host plants effects on, *Lepidoptera*, Finland 9162.
host plants, flowers, *Streptanthus*, *Pieris*, USA, California 8340.
host plants, insecticides effects on, *Achaea janata*, *Ricinus communis* 7412.
host plants susceptibility, *Nephthetis virescens*, *Oryza sativa* 8569.
host plants, viruses vectors, methodology, cages, *Aphididae* 7253.
host plants, weed control, *Euphorbia cinerea*, *Antennia absinthium* 7668.
host specificity, biological control, *Hydralia verticillata*, *Paraponyx rugosus*, USA 2204.

Feeding, (continued)

Hydrellia valis, *Spartina alterniflora*, USA, Florida, Oyster Bay 3621
infestation, effects on host plants, *Forcipata loca*, *Festuca arundinacea* 2086
karyotypes, *Bezzia nobilis*, *Culicoides nubeculosus*, *Culicoides rieti* 9411
larvae, *Argiope* eggs, *Megastelia argiopephaga* 7966
larvae, damage, *Nezara viridula*, *Vigna unguiculata* 2235
larvae, effects on yield, *Poa pratensis*, *Cylocephala immaculata* 3773
larvae, granulosis virus infection effects on, biological control, *Pennis rapae* 2942
larvae, host plants, *Oxalis*, *Galgula parva* 7560
larvae, workers, *Bombus terrestris*, *Bombus terrestris* 749
leaves damage, host plants, *Tetranichus urticae* 7764
leaves, population density, larvae, *Pseudaletia unipuncta*, *Oryza sativa* 5949
larvae, crop fields damage, pest control, *Aphis fabae*, British Isles 3800
larvae, habitat, *Necroderus*, *Necrophorus*, British Isles 5909
life cycle, host plants, *Coccophagus sanguinarius*, *Lygoconis vitticollis*, USA, Pennsylvania 5902
life cycle, parasitoids, *Parasitiera*, *Pectinophora gossypiella* 6771
life cycle, pests, *Cardastethus nazarensis* 6965
life cycle, pests, *Zonocerus variegatus*, Nigeria 8481
life history, ecological distribution, *Seymouria lividigaster*, *Leptotheca galbula*, Australia 2874
life history, host plants, *Hypurus bertrandi*, *Portulaca oleracea* 6728
life history, *Nepticula castanopsella* 3561
mass rearing methodology, *Lygus hesperus* 8023
mass rearing, methodology, *Tropophloeus bilineatus* 6477
methodology, apiculture, *Apis mellifera* 6178
methodology, culture systems, infection, *Trypanosoma*, *Glossina* 6476
morphology, developmental stages, *Hydroeca nordstroemi* 3255
mortality, stored products pests, temperature, *Stiphophus granarius* 6112
mouthparts, functional morphology, *Cetonia aurata* 6510
nut, sodium requirements, sex differences, *Pennis rapae*, USA, Pennsylvania 4346
nesting behavior, habitat, life cycle, *Osmia martina* 6851
nests stimulation, host selection, *Gastrophysa atrorufa* 486
nymphs, host plants, *Nicotiana glauca*, *Comelanea extensa*, USA, California 8290
nymphs, mother-offspring interactions, *Perisphura* 2746
parasitoids, *Eppimophilus insularis*, *Clubiona cambridgei*, *Salticus* 6756
pathogens effects on survival, *Bacillus thuringiensis*, *Heliothis virescens* 8159
pest resistance, *Poa pratensis*, *Blattus leucoporus* 1399
pests, damage, crops, *Brassica oleracea*, *Triphoplusia ni*, *Pennis rapae*, *Plutella* *xylostella* 8502
pests, *Dichocrocis punctifera* 6924
pests, effects on avoidance behavior, grazing, cattle, *Musca autumnalis* 8568
physiology, host-parasite interactions, reviews, *Nilaparvata lugens* 5675
population dynamics, ecological distribution, *Haemaphysalis japonica* 9189
population dynamics, host plants, *Insecta* 9165
population growth, colonial characteristics, mathematical models, *Myrmica* 3049
predation, pupae, *Dendroctonus pubescens*, *Hyalophora cecropia* 7592
predator-prey interactions, zooplankton, *Chaoborus*, mathematical models 4655
predators, life cycle, Aphidoleles, *Yugoslavia* 3552
predictions, damage, crop protection, *Acrididae*, USA, Montana 4634
production, population dynamics, *Acrididae*, South Africa 8365
Pteridium host plants, sympatric populations, *Drosophila megagynis*, *Drosophila* *notha*, Australia 3590
pupation, starvation, 20-hydroxy-ecdysone effects on, *Calliphora vicina* 7455
resource allocation, survival, males, *Gynopora*, *Rhopalosiphum padi* 5919
role, salivary gland, *Ixodidae* 2917
seeds loss, pasture, *Telegoryllus commodus* 9303
sexes, production, larvae, *Brachycentrus spinae*, USA, North Carolina 1484
sexual receptivity, mating, oviposition, *Amblyomma americanum* 9068
site preferences, host plants, *Heliothis zea*, *Lycopersicon esculentum* 6166
site preferences, pests, *Apium graveolens*, *Lepidoptera* 8550
stimuli, plant extracts, phenolics, *Morus*, *Bombyx mori* 7529
substrate preferences, competition, *Acyrtosiphon pisum*, food plants 5925
temperature effects, larvae, *Heteronychia arator* 369
temperature effects on predation, *Centurus fasciata* 6690
temperature effects on, *Tritoma sordida* 9082
virus-like particles transmission, *Glossina pallidipes* 8140
yeasts, *Drosophila* 9072
Zapada oregonensis, Zapada cinctipes, *Capnia confusa*, USA, Colorado 3855

Feeding apparatus,

blood sucking Insecta, design 1700

morphology, parasites, *Arrenurus* 84

Feeding behavior,

age effects, nutrient requirements, food sources population density, *Phytoseiulus* *persimilis*, *Amblyseius degenerans* 1206
antifeedants, biological properties, herbivores, *Insecta* 8294
antifeedants effects on, chlormeliform, *Manestera brassicae* 5383
appetitive conditioning, *Bosmina* regina 9078
association, *Insecta*, *Arachnida*, *Zygophyllum simplex*, *Nambia*, *Namib Desert* 9160
association, *Insecta*, USA, Pennsylvania, USA, North Carolina 2855
biology, *Litodactylus leucogaster* 1969
blood meals, *Aedes aegypti*, *Rodentia* 5160
blood meals, chemical stimuli, ATP, nucleotides, *Rhodnius prolixus* 5930
blood meals, *Culicoides*, *Zimbabwe* 1997
blood meals, *Heterodonta spiniger* 9123
blood meals, malaria vectors, *Anopheles dirus* 6063
blood meals, man, *Xenopsylla gergilli minax*, *Xenopsylla conformis* 9124
bones, *Coprophanes telamon* 497
Brachytripes megacephalus, Sicily 4324
cannibalism, larvae, *Diastira obliqua* 1209
Cantharidae, *Cephalopoda*, USA, New York 5966
carnion, forests, *Formicidae*, USA, East 4361
Ceratopogonidae, China, People's Rep. 1575
Chaoborus trivittatus, larvae, predation, zooplankton, *Daphnia pulicaria* 2001
chemoreception, anatomy, electrophysiological recording, *Phormia regina* 914
chemoreceptors signals effects on, *Phormia regina* 1737
classification, life history, *Bruchidae* 1388
cleptoparasitism, new records, *Araneae*, *Cecidomyiidae*, USA, Florida 1995
cleptoparasitism, predation, *Argyodes* 1996
colonies, semi-arid environments, *Macrotermes michaelsoni*, Kenya 2004
community composition, *Leccinum scabrum* host plants, *Mycetophila* 4439
comparative studies, strains, host plants, *Nephotettix cinctipes* 2856
competition, *Trigona*, *Phaethoniscus superciliosus*, Costa Rica 3571
Dasyporus, South Africa 471
deterrents, acids, oils, *Aleurites fordii*, *Anthonomus grandis* 226
deterrents, host plants, *Baccharis halimifolia*, *Trirhabda bacharidis* 5956
deterrents, host plants, *Prutiphora enchei* 623
deterrents, leaves, *Choristoneura rosaceana*, *Prunus persica* 8501
deterrents, *Tanacetum vulgare* extracts, *Lepidoptera* 6742
developmental stages, *Culicoides melles*, *Culicoides hollensis* 2009
diets, *Coccinellidae* 5167
diets, food conversion, growth rate, host plants, *Hyalophora cecropia* 5970
diets, gut microflora, yeasts, *Drosophila* 5917
diets, *Tadarida aegyptiaca thomasi*, *Insecta*, India 5221
dispersal, activity patterns, mating behavior, *Batocera lineolata* 2789
diurnal variations, flight activity, *Helicoverpa armigera* 7521
diurnal variations, photoperiod, *Locusta migratoria* 8303
division of labor, caste differentiation, social organization, *Pogonomyrmex* *owenii* 2282
effects on host plants larvae, *Eriophyes cladophorus*, *Solanum dulcamara* 1236
effects on infectivity, disease transmission, pumpkin mosaic virus, *Aphis* *craccivora* 3703
effects on mortality, pathogens, biological control, *Bacillus sphaericus*, *Culicidae* 1382
effects on yield, *Apis mellifera*, *Malus domestica* 1237
efficiency, food organisms, *Macrolophus quinquemaculatus*, *phleoida* 2804
extracts effects on, host plants, *Dendroctonus frontalis*, *Pinus taeda* 1941
filter feeders, *Insecta* 477
food availability effects on, *Sarracenia purpurea*, *Drosophila melanogaster* 1255
food availability, *Scaptomyza aculeus*, *Scaptomyza vicinus* 2008
food availability, survival, *Phytoseiulus persimilis*, *Amblyseius degenerans* 1870
food composition, food preferences, specialization, *Apis mellifera* 1998
food organisms, burnt ground, *Heptalus juvenilis*, *Pyrrhocoris pyrrhocoris* 6827
food organisms, *Muscipaca striata*, *Inachus* in 6823
food plants, *Coreidae*, 11 species, Costa Rica, Guanacaste Province 2801
food plants, water content, food preferences, *Atta columbica* 2005
food preferences, adults, *Alnus rubra*, *Rhinomys viridianeus*, Canada, British Columbia, Vancouver 1 2769
food preferences, food organisms, *Spodoptera frugiperda*, *Euleisia indica* 3566
food preferences, host plants, *Loxostege commixtalis* 1994
food preferences, *Nicotellidae* 496
food preferences, pollen, colonies, *Apis mellifera*, Canada, Alberta 2010
food preferences, predators, *Mariposa tigrina*, *Insecta* 1208
food preferences, *Sceloporus madraspallianus conspiciendum*, *Arachnida* 2806
food preferences, seasonal variations, *Gnatharctus tubiformans*, USA, Texas 482
food preferences, seeds, *Pogonomyrmex owenii*, *Veromermis pergandei* 2805
food preferences, *Toxorhynchites theobaldi* 494
foraging behavior, colonial characteristics, *Camponotus vagus* 2271
Forcipomyxa taiwana 499
functional morphology, mandibles, larvae, *Cucujus clavipes*, *Dendroidea* *canadensis*, *Etho depressus* 4357
habitat, geographical distribution, *Opisthacanthus cyparorum*, Brazil 5220
habitat, larvae, streams, *Pycnosyche guttifer*, Canada, Quebec 6227
habitat, new subspecies, *Agrilus amydon*, Costa Rica 7233
habitat selection, ecological distribution, *Acari*, Netherlands, Maarsseveen 1 L 5433
hematophagy, chemical stimuli, *Simulium venustum* 5921
hematophagy, surveys, 15 families, *Diptera*, Sweden 4351
host plants deterrents, *Pinus sylvestris*, *Neodiplosis serifer* 5994
host plants effects on, pest resistance, *Heliothis zea*, *Zea mays* 2044
host plants, introduced species, *Cruciferae*, *Peridra* 2048
host plants, larvae, *Heliothis*, *Gossypium* 6123
host plants larvae morphology effects on, *Adalia bipunctata* 5959
host plants, morphology, *Clanoneum americanum*, *Suaeda linearis* 5904
host plants, pest resistance, *Schizaphis graminum*, *Sorghum bicolor* 6096
host plants, pest resistance, *Zea mays*, *Heliothis zea* 9318
host plants, *Stephanitis pyrioides* 2805
host plants steroids effects on, *Epilachna varivestis* 2077
host plants, visual stimuli, light, *Synanthedon pictipes* 5929
host preferences, breeding, *Phlebotomus martini* 3567
host searching behavior, visual stimuli, olfaction, *Glossina* 1201
host-parasite interactions, *Heliothis zea*, legumes 445
insecticides effects on, circadian rhythms, *Glossina austeni*, *Protophormia* *taenraensis* 5772
larvae, damage, *Heliothis zea*, *Gossypium aboreum*, USA, New Mexico 483
larvae, effects on grasslands vegetation patterns, *Hyles lineata* 543
larvae, effects on host plants, *Heliothis virescens*, *Gossypium hirsutum* 721
larvae, environmental effects, *Lymantria monacha* 491
larvae, host plants, *Aethagona soccata* 4563
larvae, host plants, crop fields, *Wiseana*, *Trifolium repens* 3568
larvae, new species, *Dichrorhiza sapodilla*, *Dichrorhiza manilkara*, USA, Florida 1660
larvae, predation, ponds, *Chironomidae*, Canada, Quebec 1203
larvae, *Taxodium* pests, *Dorycteryx pygmaeola*, USA, Florida 3560
life cycle, flight activity, *Ceralea nigronervosa*, Norway 4529
males, *Heliothis* host plants, new species, *Gabonia gabriela* 3987
mathematical models, *Formicidae* 2799
mating behavior, life history, *Spodoptera abboti*, *Spodoptera rufipes* 6714
maxillary palps, movements, *Gryllus bimaculatus* 8055
mechanical stimuli receptors, *Glossina* 2915
metamorphosis, *Allium sativum* extracts effects on, *Epilachna varivestis* 7534
migrations, diet variations, light intensity, locomotor activity, *Nemobius* *sylvestris* 153
migrations, nymphs, *Desmonea bethula*, USA, California, Sagehen Creek 3868
nectar reward effects on, *Apis mellifera* 542
nectar secretion effects on, *Brassica campestris*, *Apis* 544
new records, *Brachiarina ramosa*, *Ostrinia nubilalis* 484
niche pattern, developmental stages, yeasts attractancy, *Drosophila buzzatii*, *Drosophila aldrichi* 3303
niche pattern, genetic variance, yeasts attractancy, *Drosophila buzzatii*, *Drosophila aldrichi* 3268
Notiphilus bugtutus 498
nutrients effects on, colonial characteristics, *Solenopsis invicta* 1991
observation methods, *Limothrips* 4363
optimization, *Bombus appositus* 495
orientation, host plants, gustatory stimuli, *Dendroctonus ponderosae* 4303
oviposition, dispersion, abundance, spatial distribution, host plants, orchards, host preferences, food preferences, preferences, vectors, vector-borne diseases, *Scaphytopus* *acutus*, *Prunus persica*, *Trifolium pratense* 526

Feeding behavior, (continued)

- parasites, *Areneus*, *Zygotera* 762.
 parasites, hardwoods parasite resistance effects on, *Bifidiformes* beesoni 481.
Palma truncatula, larvae, life cycle, *Cylindrospermum* 2779.
 phototaxis, environmental effects, *Lucilia sericata* 7506.
Pinus ponderosa extractants effects on, *Ips paracensatus* 2007.
 plants oils collection structure, *Anthophoridae* 91.
 pollination, flowers, *Insecta* 2847.
 pollination, *Xiphidium caeruleum*, *Parietaria calcarata*, *Euglossa imperialis* 558.
 pollinators, effects on flowers color, *Delphinium nelsonii* 1291.
 pollinators, environmental effects, *Andrena erigeniae* 525.
 population dynamics, host plants, dunes, *Brachymeria spiciformis*, Egypt 7591.
 potato virus Y transmission, temperature effects on, *Myzus persicae*, *Macropisium euphorbiae* 7699.
 predation, *Cordilura varipes*, *Culicoides variipennis*, USA, Virginia 6041.
 predation, food organisms, *Limnognathus nitidus*, *Nalparvata lugens* 8618.
 predation, food sources population density effects on, *Phytoseiulus persimilis*, *Amblyseius degenerans* 1205.
 predation, resource partitioning, *Notonecta*, British Isles 2904.
 predation, *Serastroma serrula* 1211.
 predator-prey interactions, *Insecta*, eggs, larvae, *Phlebotomus* includes 587.
 predator-prey interactions, *Nabis amoeniflorus*, *Spodoptera exigua*, *Lygus hesperus* 2927.
 predator-prey interactions, temperature effects, *Coccinella californica*, *Coccinella trifasciata*, *Acyrtosiphon pisum* 2878.
 predators, biological control, *Culicidae*, *Gambusia affinis* 617.
 predators, effects on biological control, *Chemes climacoides*, *Phytoseiulus persimilis* 1265.
 predators, eggs, *Dicrodiplosis manihoti*, *Phaenocarpa manihoti*, Africa 1624.
 predators, predators, *Insecta*, prey, *Rhinocyllus conicus*, larvae, USA, Virginia 1200.
 regulation, sucrose effects on, *Schistocerca gregaria* 493.
 reproduction, molting, hibernation, *Lagynochthonius hygricus* 5251.
 resource utilization, sympatric populations, *Leptomymex* 2900.
Rhytidoponera metallica, *Aphaenogaster longicrepis*, seeds, dispersal, germination, *Lepidodermis laterale*, *Eucalyptus* 1210.
 role, chemoreceptors sensilla, *Aedes aegypti* 3290.
 role, chemoreceptors sensilla, *Macroctes fascifrons* 4362.
 roots, borers, *Crossidius pulchellus*, *Gutierrezia sarothrae*, *Gutierrezia microcephala*, USA, New Mexico 488.
 social environment effects on, *Acetia domestica* 8275.
 soil, organic matter, leaf litter, *Onopeltus splendens* 9129.
 substrate preferences, food preferences, yeasts, *Drosophila mojavensis* 4342.
 temperature effects, *Stomoxys calcitrans* 1176.
 wood control, *Longicarpus alabicus*, *Heliotropium europaeum*, Australia 2950.
 wood borers, *Criophorus syriacus*, *Rhagium inquisitor*, *Ergates faber* 4344.
 wood damage, urban environments, *Copitormes kishon*, India 1405.
 wood extract effects on, *Reticulitermes flavipes*, *Coptotermes formosanus* 1810.
 workers, larvae, *Bombus terrestris*, *Bombus terrestris* 749.
 workers recruitment, trail pheromone, *Myrmica rugulosa* 4348.
- Felicia subrostrata**,
 parasites, fetal populations, Felix 511.
- Felis domestica**,
 case reports, infestation, *Lyxacusar radovskyi*, USA, Florida 2922.
- Felis domestica**,
 parasites, new species, *Demodex* 7140.
- Felis rufus**,
 pathology, infestation, case reports, *Notodores casti*, USA, Texas 3685.
- Felisia subterranea**,
 susceptibility, pathogens 9011.
- Femalis**,
 accessory gland, ablation, reproduction, hatchability, fertility, *Cochliomya hominivorax*, *Stomoxys calcitrans* 1853.
 attractiveness, age, mating behavior, males, *Tenebrio molitor* 7488.
 attractiveness, sex pheromone, *Lygoonius communis* 8098.
 attractants, reproductive behavior, *Lucilia cuprina* 215.
 body size effects on fecundity, *Anopheles messeae* 324.
 brood care, eggs, *Labidura riparia* 7489.
 competition, mating behavior, courtship, *Anabrus simplex* 3532.
 courtship, tracking, *Drosophila melanogaster* 1140.
 dimorphism, *Hyphodius ovatus*, Finland 7895.
 effects on, spermatophores, deposition, *Pelodytes malabarica* 1875.
 eggs, development, temperature effects, *Apis mellifera* 1878.
 eggs, trapping, predictions, population levels, *Delia coarctata* 1290.
 fecundity, carbofuran effects on, *Unaspis eunymus* 2651.
 food preferences, salts, chemoreception, reproduction, *Phormia regina* 7296.
 genitalia, dissection methodology, *Isodonta* 62.
 genitalia, morphology, *Encicospilus amencanus*, *Encicospilus flavoscutellatus* 8888.
 genitalia morphology, *Hyphodius ovatus* 92.
 hatching sequence, sex differences, *Lymnatis dispar* 5807.
 hosts, blood meals, domestic animals, *Psorophora columbiae*, USA, Texas 6074.
 intraspecific relationships, parental behavior, agonistic behavior, *Sphex ichneumon* 9215.
 longevity, ethylene effects on, *Melanoplus sanguinipes* 4264.
 mate selection, *Chauliognathus pennsylvanicus*, competition effects on, interspecific relationships, *Vespula* 142.
 mate selection, courtship, *Colias eurytheme*, *Colias philodice* 407.
 mating, overwintering, spermatophores storage, *Scaptomyza aetulus*, USA, Florida 5148.
 morphology, *Beata albopilosa*, Brazil 8736.
 morphology, *Belotus paranensis*, Brazil 6370.
 morphology, bristles, frenulum, *Lepidoptera* 1720.
 morphology, developmental stages, keys, *Saussia coffae* 1705.
 morphology, *Elachista nielsensii*, Finland 4114.
 morphology, *Graphoderus mantibensis* 7278.
 morphology, *Lutzomyia termitophila* 6506.
 morphology, *Neoblatella puerilis*, Brazil 9499.
 morphology, *Pycnosiphia flavata* 5633.
 morphology, *Rhyacophila spinata*, USA, California, Placer Co 6461.
 morphology, *Taphrodoropsis mendis*, Brazil 6358.
 morphology, *Varroa jacobsoni* 4110.
 new records, taxonomy, morphology, *Dendrolimus benderi*, India 4739.
 oogenesis, hormones, starvation effects on, *Labidura riparia* 966.
 photoperiods, males, effects on, calling behavior, pheromones, oviposition, *Trichoplusia ni* 1881.

Females, (continued)

- population studies, dispersal, gonotrophic cycles, *Aedes africanus*, Uganda 1295.
 progeny, sterility, precocene effect on, *Glossina morsitans morsitans* 2698.
 reproductive organs, anatomy, *Gonia cinerascens* 2669.
 reproductive systems, morphology, *Gonia cinerascens* 6631.
 resting behavior, activity patterns, breeding status, gravid, virgin, *Glossina morsitans morsitans* 5851.
 seminal fluid storage, enzymatic activity, *Drosophila melanogaster* 2716.
 sex hormones source, neuroendocrine system cells, *Rhodnius prolixus* 964.
 sex pheromone, purification, chemical composition, *Ptineella xylostella* 8964.
 sexual behavior, orientation, sex pheromone, *Plodia interpunctella* 5840.
 sexual reproduction, mutagens effects on, *Pimpla insularis* 3094.
 species richness, abundance, *Culex theileri*, Aedes, *Jappa*, *Aedes durbanensis*, South Africa, Orange Free State 5282.
 spermatophores storage, *Enallagma cyathigerum* 8210.
 spermatophores storage, sex chromosomes breakage, triethylenemelamine, ethylenethanesulfonate effects on, *Drosophila melanogaster* 1515.
 sterilization, α radiation, effects on mating behavior, fertility, *Dacus cucurbitae* 7457.
 taxonomy, morphology, *Psilopsocus pulchripennis* 1676.
 testing, methodology, pest control, sex pheromone, *Choristoneura fumiferana* 5291.
- Femur**,
 cell surface, antigenic characteristics, *Blaberus craniifer* 100.
- Fenitrothion**,
 insecticides, chemical control, efficacy, *Holotrichia consanguinea* 7792.
 pest control, crop fields, *Cucurbita*, *Dacus cucurbitae* 7788.
 pest control, stored products, *Insecta* 2190.
 pesticides, effects on oviposition, *Lyctus brunneus* 1060.
 pesticides (organophosphorus), sensitivity, larvae, *Culex pipiens*, *Culex hortensis*, *Theobaldia longicaerulea* 8192.
 pesticides, toxicity evaluation, *Apis mellifera* 8171.
- Fenitrothion**,
 insecticides, acaricides, efficacy, *Tetranychus telarius* 7794.
 insecticides, chemical control, efficacy, *Holotrichia consanguinea* 7792.
 toxicity, eggs, *Rhodnius prolixus* 9022.
- Fenvalerate**,
 chemical control, crop protection, grasses, *Heliothis armiger* 728.
 effects on foraging behavior, crop fields, *Apis mellifera* 4475.
 insecticides, chemical control, efficacy, *Holotrichia consanguinea* 7792.
 insecticides, chemical control, pests, field trials, *Phyllonixia citrella* 8445.
 insecticides, ear tags, cattle, chemical control, *Musca autumnalis*, *Haemaphysa irritans* 9257.
 insecticides, pesticide residues, measuring techniques, chromatography, GLC, *Acrididae*, *Aedes* 1833.
 insecticides, pesticide resistance, strains, *Nilaparvata lugens* 4222.
 insecticides, toxicity, *Anthonomus grandis grandis* 9026.
 pest control, chemical control, *Insecta* 5326.
 temperature effects on toxicity, *Trichoplusia ni*, *Spodoptera frugiperda*, *Heliothis virescens* 8206.
- Fergusonia syzygii**,
 new species, taxonomy, new records, India 4831.
- Ferrisia virgata**,
 parasites, new species, *Pseudaphysus debachi*, Mexico 2446.
 vectors, plant diseases, abundance, Ghana 1260.
- Fertility**,
 accessory gland, ablation, females, *Cochliomya hominivorax*, *Stomoxys calcitrans* 1853.
 BHC effects on, *Rodnius prolixus* 9056.
 chemosterilants effects on sex differences, *Callosobruchus chinensis* 1066.
 Y chromosome, fertility, *Drosophila melanogaster* 3089.
 competition, diapause, males, *Anthonomus grandis grandis* 2677.
 cross-breeding, *Tetranychus urticae*, *Tetranychus arbutus* 7880.
 crowding effects on, larvae, *Epiphyas postvittana* 6011.
 diets, *Culicoides simulator*, USSR, *Abakan* 9197.
 diets, effects on, *Cydia pomonella* 2765.
 egg production, fecundity, reproductive behavior, *Dendroctonus frontalis* 1150.
 eggs, mating frequency effects on, *Papilio polytes asernus* 7491.
 fecundity, diets, *Atherigona soccata* 4434.
 fecundity, methoprene effects on, *Cydia pomonella* 8236.
 genetics, translocations, mating types, heterozygotes, pest control, *Musca domestica* 2328.
 hybridization, reproductive isolation, *Ostrinia* 7050.
 juvenile hormones analogs effects on, *Sitotroga cerealealis* 1062.
 longevity, parasitism effects on, *Trichopoda pennipes*, *Nezara viridula* 5936.
 photoperiods, juveniles, males, *Anagasta kuehniella* 1880.
 population density effects on, chemosterilants, *Musca domestica* 384.
 social organization, queens, *Lepidoptera provancheri* 2285.
 sterilization, α radiation, females, *Dacus cucurbitae* 7457.
 symbionts effects on, *Wolbachia*, *Ephestia cautella* 501.
 temperature effects, *Ephestia cautella*, *Plodia interpunctella* 1874.
- Fertilization**,
 eggs, spermatophores storage, *Baculum* 6654.
- Fertilizer application**,
 effects on abundance, pests, *Earias insulana*, *Pectinophora gossypiella*, *Gossypium* 6973.
- Fertilizer applications**,
 crop fields, pest control, *Leucodendron orbonalis* 7707.
 effects on crop fields damage, *Trinicum*, *Microtermes obesi* 5372.
 effects on population dynamics, damage, *Sorghum bicolor*, *Schizaphis graminum* 8510.
- Fertilizers**,
 control programs, chemical control, larvae, *Callicidae*, Czechoslovakia 2930.
- Festuca**,
 Forcipata loca, feeding effects on 2069.
- Festuca arundinacea**,
 host plants, infestation, feeding effects on, *Forcipata loca* 2086.
 pests, infestation, effects on growth, *Forcipata loca* 2087.
- Fibers**,
 skeletal muscle, action potential, calcium requirements, *Carassius morosus* 111.
 webs, protein biosynthesis, chemical composition, *Nephila clavipes* 186.
- Fibrils**,
 muscles, terminology, larvae, *Lepidoptera* 2521.
- Fibroin**,
 crystals, structure, silk, *Bombyx mori* 5719.

- Fibroin, (continued)**
promoters, location, genes, *Bombyx mori* 4663.
protein biosynthesis, silk gland, poly(A)-containing mRNA, purification, *Bombyx mori* 8979.
- Fibroin transport,**
secretion, silk gland, *Bombyx mori* 3376.
- Ficus,**
association, species composition, *Lissocaphala*, *Drosophila fima*, Africa 5964
host plants, ecological distribution, *Drosophila fima* 1628
host plants, pollinators, symbiosis, *Agaonidae* 2848.
reproductive strategy, host plants, pollination, *Ceratosolen* 6781
- Ficus glabrata,**
host plants, pollination, reproductive success, *Agaonidae* 2051
- Field trials,**
insecticides efficacy, *Agrotis orthogonia* 9312.
- Field trials,**
attractants, chemical stimuli, visual stimuli, pest control, *Rhagoletis pomonella* 4583.
biological control, *Bacillus thuringiensis israelensis*, *Aedes vigilax*, *Culex sitiens*, Fiji 6150
biological control, efficacy, *Bacillus thuringiensis*, *Trichophtana n* 6147
biological control, parasites, *Neoplectana bibionis*, *Synanthedon tipuliformis* 7767
biological control, pasture, *Bacillus thuringiensis israelensis*, *Aedes*, USA, Montana 6149
bioassays, insecticides, electronic equipment, incubation, *Lygus hesperus*, *Acyrtosiphon pisum* 8015
chemical control, pests, insecticides, fenvalerate, *Phyllocnistis citrella* 8445.
insecticides, chemical control, *Calocoris norvegicus*, *Sidna kinbergi* 8476.
- Fighting,**
intraspecific relationships, *Saliciscus scenicus* 1195.
- Fiji,**
biological control, field trials, *Bacillus thuringiensis israelensis*, *Aedes vigilax*, *Culex sitiens* 6150.
new species, *Oribatida* 7139
- Filaria,**
disease control, population levels, vectors, *Anopheles farauti*, Guadalcanal 1357
- Filipjevimeris leipandra,**
parasites, mass rearing methodology, biological control, *Diabrotica balteata* 8494
- Filistata brigholli,**
new species, taxonomy, morphology, Mexico 8733.
- Films,**
locomotion analysis, *Arthropoda* 852.
- Filter feeders,**
feeding behavior, Insecta 477.
functional morphology, hydrodynamics, larvae, *Simulium vittatum* 4353.
- Filters,**
photoreceptors, visual discrimination, wave length, *Phalacroba* 8920.
- Filtration,**
particle size, food composition, *Solenopsis invicta* 1993.
- Finland,**
aggregation, mud, *Pteris napi* 9092.
check lists, species composition, taxonomic revision, species, *Platygastridae* 7894.
climbing, reoccupation, trees, larvae, *Neodiprion sertifer* 7522.
Coleoptera, fauna, species composition, crop fields, Avena 2220.
coloration, variability, population studies, *Aphantopus hyperantus* 2104.
community composition, food sources, availability, *Bombus* 4476.
community composition, zonation, geographical variations, crop fields, *Coleoptera* 5299
diets, food sources, *Monopis spilotella*, *Archinemapogon laterellus*, *Nemapogon picarellus* 7532.
egg production, survival, overwintering, *Rhopalosiphum padi* 5225.
host plants, effects on abundance, species richness, *Lepidoptera* 9162
morphology, females, *Elachista nielsowiffi* 4114.
new records, geographical distribution, *Acronchis inularis*, records, species composition, *Coleoptera* 7897.
new records, geographical distribution, dimorphism, females, *Hyphidrus ovatus* 7895
new records, pathogens, *Entomophthora*, *Insecta* 5721.
new species, taxonomy, morphology, *Eupithecia expallidata* 7220.
new species, taxonomy, morphology, *Nocemphera tuomikoskii*, *Nocemphera picipennis*, *Nocemphera striata* 7961.
new species, taxonomy, morphology, new records, *Trichoptera* 1570.
parasitism, eggs, *Telenomus aradi*, *Aradus cinnamomeus* 5934.
population dynamics, fecundity, survival, gynopares, *Rhopalosiphum padi* 5226.
population structure, life history, *Aradus cinnamomeus* 1960
population structure, seasonal variations, physical activity, *Proteroiulus fuscus* 5242.
population studies, coloration, environmental conditions, human impact, *Aphantopus hyperantus* 9186.
species composition, occurrence, summer, *Lepidoptera* 7896.
species composition, seasonal variations, annual variations, *Trichoptera*, *Coxiidae* 8673.
species richness, herbivores, seasonal variations, larvae, *Macrolepidoptera* 4327.
taxonomy, revision, nomenclature, *Symphyla* 7209.
zoogeography, *Eumenes pedunculatus*, *Eumenes coarctatus*, *Eumenes coronatus*, *Eumenes pupillarius* 7893.
- Finland, Hango Peninsula,**
population structure, age distribution, life span, *Aradus cinnamomeus* 5217.
- Finland, Uusimaa,**
new genera, new species, taxonomy, morphology, *Agekianella koponeni* 6429
- Fioria lycraea,**
new records, Iran 851.
- Fiorinia externa,**
ectoparasites, life history, *Tsuga canadensis*, USA, Pennsylvania 437.
- Fires,**
forests, environmental change, effects on species composition, *Carabidae* 6840.
recovery, chaparral, succession, community composition, *Insecta*, USA, California 5246.
- First record,**
autogeny, *Tabanidae*, Brazil 1132.
parasites, host range, *Ceolomomyces africanus*, *Mermithidae*, *Culicidae*, Angola 1271.
- First records,**
nest, *Osmia sculleni*, USA, Utah 5880.
- Fishery products,**
infestation, moisture effects on, *Suidasia melanensis* 2948.
infestation, salts effects on, *Suidasia melanensis* 2949.
- Fitness,**
adaptiveness, slavery, *Formicidae* 1478.
breeding success, males, population genetics, *Drosophila melanogaster*, *Drosophila pseudoobscura* 3125.
components, environmental effects, *Phascolus vulgaris* 770.
drones, inbreeding effects on, *Apis mellifera carnica* 4697.
epistasis effects on, *Drosophila melanogaster* 2318.
fecundity, population density effects on, *Drosophila melanogaster* 2770.
inversion, epistasis, *Drosophila melanogaster* 2319.
mating behavior, breeding success, *Drosophila* 5059.
mutants, competition, wild type, *Pecunophora gossypiella* 8364.
polymorphism, environmental effects, population genetics, *Drosophila melanogaster* 1555.
population genetics, subdivision, *Tribolium castaneum* 3603.
population growth, population density, *Drosophila melanogaster* 2867.
reproduction, temperature, carboxylic-ester hydrolase, alleles, males, *Drosophila melanogaster* 7474.
selection, sex ratio, parasitoids, *Heterospilis prusoidis* 7538.
translocations, homozygotes, genetic factors, *Hyemyla antiqua* 2330.
- Fixsenia ontario violae,**
habitat, life history, USA, West 7513.
- Flagella,**
ultrastructure, symbiosis, bacteria, *Foania*, *Pyrsonympha* 5172.
- Flashing,**
electrical stimulation, control neurons, males, *Photuris versicolor* 994.
patterns, central nervous system organization effects on, *Photuris versicolor* 265.
- Flatidae,**
geographical distribution, Turkey 4735.
- Flavicorniculum,**
new genera, taxonomy, morphology, China, People's Rep. 3996.
- Flavicorniculum forficulum,**
new species, taxonomy, morphology, China, People's Rep. 3996.
- Flavicorniculum hamiforceps,**
new species, taxonomy, morphology, China, People's Rep. 3996.
- Flavicorniculum multisetosum,**
new species, taxonomy, morphology, China, People's Rep. 3996.
- Flavicorniculum plantiforceps,**
new species, taxonomy, morphology, China, People's Rep. 3996.
- Flavonols,**
mutagenicity testing, lethality, *Drosophila melanogaster* 5475.
- Flight,**
aerodynamic properties, *Calliphora erythrocephala* 888.
chemotaxis, pest control, *Anthonomus grandis* 2225.
chemotaxis, sex pheromone, visual stimuli, *Grapholita molesta*, *Heliothis virescens* 5843
control, antennae, locomotor activity, aerodynamic properties, *Aglais urticae* 4956.
control, antennae, locomotor activity, aerodynamic properties, *Aglais urticae* 4957.
dispersal, *Callosamia promethea* 7590.
dispersal, ovary development, environmental factors, *Hippodamia convergens* 9171.
diurnal variations, light, mobility, *Helicoverpa armigera* 6693.
drinking behavior, *Tabanidae* 4360.
effects on lipid metabolism, flight muscle, *Periplaneta americana* 958.
electrical stimulation, ganglia, optomotor response, *Calliphora erythrocephala* 894.
emergence, patterns, temperature effects, spring, *Ostrinia nubilalis* 2102.
energetics, thermoregulation, *Malacosoma americanum* 6524.
flight muscle metabolism, *Locusta* 893.
functional morphology, sensilla, wings, *Cetonia aurata*, *Geotrupes silvaticus* 7802.
height, spatial distribution, *Drosophila nebulosa*, *Drosophila polymorpha*, *Drosophila latifasciataformis* 8289.
locomotion, *Insecta* 3274
males, sex pheromone components effects on, *Spodoptera litura* 1160.
measuring techniques, dispersion, *Tetracops tetracanthus* 2099.
metabolism, enzymes, energy output, *Drosophila melanogaster* 2519.
migrations, capture-recapture studies, *Syrphidae*, Switzerland 9170.
motor activity, nerve transmission, interspike interval, *Drosophila* 7285.
orientation, magnetic fields, *Noctua pronuba* 8262.
orientation, visual stimuli, *Drosophila hydei* 5864.
range, capture-recapture studies, vectors, African trypanosomiasis, *Glossina fuscipes quanzensis*, Congo, People's Rep. 4490.
range, disease transmission, *Culicoides variipennis* 2103.
range, pollination, *Medicago sativa*, *Pithitis smaragdula* 7564.
Speophymella valida, *Pyrgota undata*, *Boreothrinax maculipennis* 2366.
traps, design, *Insecta* 1687.
traps, *Hymenoptera* 2484
visual perception, motor activity, neurophysiology, *Drosophila melanogaster* 6683,
visual perception, visual stimuli, *Musca domestica* 907
water balance, hemolymph, diuresis, *Rhodnius prolixus* 7351.
wings, aerodynamic properties, *Isogenus*, *Chrysopa*, *Myrmelcon*, *Limnephilus* 6522.
wings, morphology, environmental effects, habitat, *Trox* 4954.
- Flight activity,**
abundance, diurnal variations, traps, *Culicidae* 7617.
adults, *Pleocoma*, USA, Oregon 5729
adults, temperature effects, pupae storage, *Cochliomyia hominivorax* 1868.
adults, *Trichoptera*, USA, Pennsylvania, Linesville Creek 7027.
aerodynamic properties, *Rhopalocera* 8902.
aquatic organisms, adults, juveniles, *Insecta* 1486.
chemical control, insecticides timing, *Synanthedon rhododendri*, pheromone traps 700
circadian rhythms, photoperiod, *Culex pipiens quinquefasciatus* 8279.
colonies, nesting behavior, *Vespa consobrina* 9357.
copulation, sexual behavior, *Eudictoria tibialis*, USA, Maryland 2733
deltamethrin effects on, glossina moritans 314
diel activity, seasonal variations, *Culicoides variipennis*, *Culicoides crepuscularis*, *Culicoides hirsutipectus*, *Culicoides palmerae*, USA, Colorado 442.
diets, *Simulium ornatum* 5878
dispersal, colonization, freshwater environments, *Insecta* 6230.

Flight activity, (continued)

- dispersal, marking, Brazil, Argentina, *Tritoma infestans* 1263
dispersal, ovary development, *Hippodamia convergens* 5211
dispersal, pests, crop fields, *Schizothrips graminum* 3770
dispersal, population dynamics, *Triphaba virgata*, *Triphaba borealis* 8360
durnal variations, feeding behavior, *Helicoverpa armigera* 7521
durnal variations, measuring techniques, *Tortricidae* 472
durnal variations, seasonal variations, *Trileurodes vaporariorum*, *Encarsia formosa* 9116
durnal variations, temperature effects on, *Rhopalosiphum padi* 7516
emergence, environmental effects, *Cyclocephala* 1971
emergence, overwintering, *Thanosius dubius* 9084
energetics, *Malacosoma americanum* 891
energetics, physiology, age effects, *Apis mellifica* 4241
energetics, *Sphingidae* 118
energy sources, feeding behavior, *Culicoides melleus*, *Culicoides hollensis* 2009
environmental effects, photoperiods, humidity, rearing, *Locusta migratoria* 4261
environmental effects, relative humidity, photoperiod, *Locusta migratoria* 2541
environmental effects, weather, seasonal variations, *Dendroctonus frontalis* 1169
environmental factors, wind, food, temperature, *Schistocerca gregaria* 1171
Ephemera damica, British Isles, Lambourn R. 7013
fecundity, *Bactra veruta* 6821
finches, droops, breeding effects on, *Apis mellifica carnica* 4697
flight muscle spikes, timing, *Aceridae* 150
food organisms effects on, *Scarabaeidae*, *Taenia saginata*, Kenya 1317
foraging behavior, microwave radiation effects on, *Apis mellifica* 5877
habitat, new subspecies, *Agrilus amydon*, Costa Rica 7233
host searching behavior, *Myzus persicae* 1978
immigration, diapause, *Agrotis ipsilon*, USA, Iowa 5900
Libellula depressa, Austria, North Tyrol 7070
life cycle, *Cataglyphis sabulosus* 9114
life cycle, feeding behavior, *Ceralea nigronervosa*, Norway 5429
life cycle, sampling methodology, *Euxoa scandens* 6094
life history, host plants, *Hemileuca grolli* 7508
life history, *Masandae*, South Africa 470
lipid metabolism, energetics, *Rhodnius prolixus*, *Tritoma infestans* 4955
locomotion, dispersal, *Dacus tryoni* 5977
males, sex pheromone components effects on, *Trichoplusia ni* 419
males, sex pheromone components effects on, *Trichoplusia ni* 1927
males, sex pheromone response, *Pseudaletia unipuncta* 219
mating behavior, sex pheromone, *Hyphantria cunea* 1528
mating behavior, swarms, sex ratio, *Encicophaeidae* 6671
migration, fat body lipid biosynthesis, *Chortocetes terminifer* 2557
migrations, radar, *Persectania ewingii*, *Heliothis punctiger*, *Agrotis munda*, Australia, Bass Strait 1264
night, aggregation, convergence zones, atmospheric conditions, *Insecta* 7573
night, surveys, *Lepidoptera*, USA, Colorado 2791
olfactory stimuli, orientation, chemoreception, atmospheric conditions, *Insecta* 5130
optomotor response, visual stimuli, compound eyes, *Apis mellifica* 4981
orientation, ocelli effects on, *Aceridae* 149
orientation, visual perception, *Musca domestica* 1155
oviposition, life history, *Euproschelus euerpe*, USA, California 7511
oviposition, salt marshes, *Hybonutia daeckii*, USA, New Jersey Coast 6710
periodicity, durnal variations, *Dielphidae*, *Cicadellidae* 6711
periodicity, *Lepidoptera*, Malaysia 7514
periodicity, seasonal variations, *Odonata* 4440
phenology, *Rhopalosiphum padi*, *Sitobion avenae*, *Metopolophium dirhodum* 6826
phenology, *Triphoxys attenuatum*, *Triphoxys figulus* 998
pheromones, stored products pests, *Pyralidae*, *Gelechiidae* 7663
photography, methodology 5468
plum post virus vectors, orchards, *Aphididae* 3835
population levels, pheromone traps, *Conopia myopaeformis* 6953
seasonal variations, *Chironomus decorus*, USA, New Jersey 7014
seasonal variations, environmental effects, *Lymantria monacha* 7512
seasonal variations, *Pentatomidae* 474
seasonal variations, pheromone traps, *Chrysoclechia topiana* 5901
seasonal variations, *Tahandae*, Brazil, Manaus 4426
sensory stimuli, *Hypera postica* 8061
settling behavior, disease transmission, *Rhopalosiphum padi* 3562
sex differences, *Tritoma infestans* 3275
sex pheromone, correction, *Plodia interpunctella* 1122
sex pheromone effects on, *Bradyia impatiens* 416
sex pheromone, males, *Chortocetes fumiferana* 2736
sexual reproduction, *Nectopsyche albidus*, USA, Indiana 3862
slope soaring behavior, aerodynamic properties, energy expenditure, *Pantala flavescens* 5137
species composition, *Diptera*, USSR, Donetsk 9195
species composition, Keys, *Catocala*, USA, South Dakota 7917
swarming behavior, *Ophiya leucostoma* 8288
temperature effects, body size, *Anopheles* 3276
temperature effects, *Lepidoptera* 1943
temperature, predictions, *Ostrinia nubilalis*, USA, Ohio 5124
traps, *Tortricidae* 52
U.V. radiation effects on, *Antheraea pernyi* 6702
variability, food availability effects on, *Spodoptera exempta* 580
velocity, energetics, *Locusta migratoria* 8062
velocity, wing-beat frequency, *Locusta migratoria* 2522

Flight muscle,

- activation, neurophysiology, *Insecta* 1733
development, mechanical stimuli effects on, *Anastrepha suspensa* 8228
development, *Tetraglysis oceanicus* 6521
electrochemistry, potassium, mutation, *Drosophila* 5660
enzymatic activity, age effects, *Drosophila melanogaster* 1755
enzymes, α -trehalase, *Locusta migratoria* 4959
lipid metabolism, flight activity, *Rhodnius prolixus*, *Tritoma infestans* 4955
lipid metabolism, flight effects on, *Periplaneta americana* 958
malate dehydrogenase, malate dehydrogenase (decarboxylating), *Leptinotarsa decemlineata* 3315
metabolism, flight, *Locusta* 893
mitochondria, age effects on, *Musca domestica* 322
mitochondria, enzymatic activity, ATP pyrophosphatase, *Musca domestica* 945
mitochondria, lipid composition, temperature effects on, *Schistocerca gregaria* 8105

Flight muscle, (continued)

- mitochondria, temperature effects on lipid composition, phase transition, *Schistocerca gregaria* 5709
multienzyme complexes, fructose-bisphosphate aldolase + triosephosphate isomerase, purification, characterization, *Ceratitis capitata* 2574
protein biosynthesis, mitochondria, cytoplasm, *Calliphoridae* 2567
protein composition, myosin, *Drosophila melanogaster* 1770
proteins, purification, characterization, *Apis mellifica* 2578
regeneration, degeneration, seasonal variations, *Lissorhynchus oryophilus* 1732
respiration, enzymatic activity, temperature effects, *Calliphora erythrocephala* 169
spikes, timing, orientation effects on, *Aceridae* 150
- Flight muscles,**
development, neuromuscular junctions, structures, *Manduca sexta* 8910
- Flooding,**
irrigation, effects on, habitat utilization, *Aedes vexans*, USA, Florida 1389
substrate, streams, environmental effects, abundance, *Limnodynastes insularis*, *Cryptobranchius latus*, Costa Rica 2294
- Floods,**
recolonization, *Insecta*, USA, Arizona, Sycamore Creek 5432
- Flour,**
Lens culinaris, effects on growth, development, *Callosobruchus maculatus* 7772
Vigna mungo, effects on growth development, *Callosobruchus chinensis* 7763
- Fluorescence,**
salivary gland cells, mutants, circadian rhythms, *Drosophila melanogaster* 4982
- Flowering,**
coevolution, pollinators feeding behavior, *Andrena erigonae*, *Claytonia virginica* 525
crop fields, effects on infestation, *Oenophium*, *Pectinophora gossypiella* 3765
food plants, effects on emergence diapause, *Megastigmus specularis*, *Megastigmus spectromorphus* 5905
host plants, life history adaptations, *Schinus molle*, *Pyrrhopygus* 6790
host plants, pollination, *Insecta*, Lomatium 6785
host plants, population genetics, reproductive strategy, pollination, *Insecta* 1582
phenology, host plants, effects on infestation, *Frumentaria mundinella*, *Solanum canariense* 2839
phenology, host plants, pollination, community structure, *Bombus* 1258
phenology, host plants, pollination, *Insecta*, USA, Missouri 2047
phenology, pollination efficiency, *Brassica napus oleifera*, *Apis mellifica* 4582
phenology, pollination, *Linaria vulgaris*, *Insecta* 5203
phenology, pollination, *Pseudaletia cecropifolia*, *Apididae*, Brazil 4412
phenology, pollination, *Rollinia mucosa*, *Chrysoclechia*, Brazil 4410
phenology, pollination, *Solanum palmarum* 4411
phenology, pollinators population dynamics, *Yucca whipplei*, *Tegeticula maculata* 8347
phenology, *Spiraea vanhouttei*, *Aesculus hippocastanum*, *Robinia pseudoacacia*, *Hibiscus syriacus*, composition, development, *Alaternus spreatus* 1867
pollination, *Carduus palmaris*, *Metopostema* 9150
pollination, evolution, *Argemone*, *Insecta* 5200
pollination, *Fraxina canadensis*, *Apididae* 6791
pollination, host plants, *Asarum canadense*, *Diptera* 6786
pollination, *Nymphaea elegans*, *Insecta*, USA, Texas 5209
pollinators competition, *Centaurea scabiosa*, *Centaurea junci* 6802
- Flowers,**
Acronium columbinum, foraging behavior, energy intake optimization, *Bombus*, USA 814
Roxas Mt. 4345
association, *Linodendron tulipifera*, *Lygocoris carneyi*, *Lygocoris omnivagus*, *Cantharidae*, *Cephalopoda*, USA, New York 5966
chemical stimuli, anemotaxis, *Hadena bicruris*, *Deilephila elpenor* 5866
color, host plants, pollinators effects on, *Hyles lineata*, *Aquila caerulea* 1534
color, pollinators feeding behavior effects on, *Delphinium nelsoni* 1291
color, visual discrimination learning, cross-pollination, *Apis mellifica* 9083
effects on feeding behavior, *Xiphidium caeruleum*, *Paratetrapedia calcarata*, *Euglossa imperialis* 558
foraging behavior, chemical communication, scent marking behavior, *Bombus vosnesenskii* 1925
foraging behavior, continuous reinforcement, *Bombus edwardsii* 3543
foraging behavior, interspecific relationships, *Bombus*, *Syrphidae* 2115
foraging behavior, prairies, *Hymenoptera*, USA, Wyoming 3564
host plants, feeding, *Streptanthus Pteris*, USA, California 8340
nectar, effects on foraging behavior, *Bombus sandersoni*, *Vespula vulgaris* 2049
pollination efficiency, *Halictus* 5197
pollination, feeding behavior, *Insecta* 2847
pollination, feeding, *Lejops vitata*, Netherlands 2061
saccharides, food composition, food preferences, specialization, *Apis mellifica* 1998
Solanum tuberosum, cross-pollination, efficiency, *Apis mellifica*, *Bombus fervidus*, *Bombus impatiens* 1285
- Fluids,**
adsorption, mdgut, diuretic, *Rhodnius prolixus* 5679
canavanine effects on, *Locusta migratoria* 3370
digestion, solubility, *Autographa californica* nuclear polyhedrosis virus, *Trichoplusia ni* 4201
digestive tract, diets, *Schistocerca gregaria* 2552
digestive tract, enzymatic activity, larvae, *Trichoplusia ni* 1749
digestive tract, nutrient uptake, *Schistocerca gregaria* 2553
excretion, blood meals, *Aedes aegypti* 2798
excretion, malpighian tubules, canavanine effects on, *Locusta migratoria* 3370
transport, salivary gland ducts, *Aedes aegypti* 7362
- Fluorescence,**
chromosomes, nucleoproteins relationship meiosis, spermatocytes, *Lepidoptera* 6282
eye, mutants, genetic analysis, *Ceratitis capitata* 1532
photoreceptors cells, *Musca domestica* 4133
pigments, aging, lysosomes, *Spodoptera eridania* 4240
RNA, hybridization, DNA, *Drosophila melanogaster*, *Drosophila hydei* 2304
- 5-Fluorodeoxyuridine,**
effects on DNA biosynthesis, larvae, *Chironomus* 2299
- Fluorolipids,**
pesticides, chemical control, toxicity, *Reticulitermes flavipes* 1054
- Fluorouracil,**
inhibition, mutants, gene expression, *Drosophila* 1528

- Fossils**, symbionts ultrastructure, flagella, bacteria 5172
- Foaming**, defense mechanisms, *Pachycondyla* 476
- Foliage**, age, *Arachis hypogaea*, effects on, feeding, oviposition, longevity, *Spodoptera* 382
- damage, herbivory, *Eucalyptus* *blakelyi*, Insecta, Australia 2045
- host plants, effects on dispersal, *Lymantria dispar* 5980
- nutrients, pests infestation effects on, *Tetranychus urticae*, *Arachis hypogaea* 3794
- toxicity, phenol, *Lycopersicon esculentum*, *Heliothis zea* 5793
- Foliar applications**, insecticides, chemigation, pest control, crop protection 4581
- Follicles**, cytoplasmic streaming, oogenesis, *Drosophila* 7476
- epithelium, eggs development, *Heteropeta pygmaea* 334
- growth, blood meals, *Stomoxys calcitrans* 9051
- junctions development, oogenesis, *Rhodnius prolixus* 1130
- morphology, oogenesis, *Musca domestica* 2708
- morphology, temperature-sensitive mutant, *Drosophila melanogaster* 3099
- physiology, β -ecdysone, effects on, *Carausus morosus* 4263
- protein biosynthesis, vitellogenin, *Drosophila melanogaster* 3506
- Folsomia candida**, food organisms, predatory behavior, *Serrastroma serrula* 7533
- predator-prey interactions, *Serrastroma serrula* 1199
- Folsomia lugubris**, colonies, aggressive behavior, interspecific relationships, intraspecific relationships, *Folsomia cuculinarum* 5159
- Food**, antigens analysis, *Acan* 2913
- attractants, attractiveness, sex differences, comparative studies, *Hylemya* 485
- competition, intraspecific relationships, larvae, *Aedes aegypti* 3618
- diets, artificial substrates, rearing, methodology, *Sabukodes aegrotata* 4084
- environmental factors, flight activity, wind, temperature, *Schistocerca gregaria* 1171
- habitat utilization, biomass turnover, *Chorthippus parallelus* 7624
- Food additives**, chemical control, poultry ectoparasites, *Ornithonyssus sylviarum* 1397
- Food availability**, *Drosophila melanogaster* food organisms, effects on feeding behavior, *Sarracenia purpurea* 1255
- effects on brood rearing, colonies, *Apis mellifera* 8233
- effects on flight activity variability, *Spodoptera exempta* 580
- effects on growth, survival, spatial distribution, *Coenagrion resolutum* 7808
- effects on, spermatophores, deposition, *Polykylia malabarica* 1875
- limiting factors, reproduction, colonies, *Coptotermes formosanus* 4646
- environmental effects, neuroendocrine system, *Insecta* 3338
- factors affecting population regulation, mortality, *Dendroctonus ponderosa* 1299
- fecundity, development, *Phytoseiulus persimilis*, *Amblyseius degenerans* 1870
- food preferences, *Scaptiscus aetulus*, *Scaptiscus vicinus* 2008
- food sources, competition, pollinators, *Bombidae* 6822
- limiting factors, life history, *Tenodora andifolia sinensis* 2906
- limiting factors, population density, *Pocia abies*, *Gilpinia cecropia* 5970
- population density, territorial behavior, *Agelopsis aperta* 2908
- yeasts, oviposition site selection, niche pattern, *Drosophila melanogaster* 3530
- Food chains**, acute toxicity, acetophate, *Phytoseiulus persimilis*, *Tetranychus urticae* 309
- bioaccumulation, mercury, *Basidiomycetes*, larvae, *Diptera* 5129
- bioaccumulation, pollution effects, deposit feeders, toxicity testing, methodology 4314
- pollution effects, PCB, bioaccumulation, *Bacillus*, *Aedes aegypti*, *Lebistes reticulatus* 7811
- Food composition**, particle size, filtration, *Solenopsis invicta* 1993
- saccharides, food preferences, specialization, *Apis mellifera* 1998
- Food consumption**, assimilation, energy utilization, *Chrotogonus trachyporus* 8929
- development, social environment effects on, *Acetia domesticus* 8275
- energy intake, predators, foraging behavior, *Macroleon quinquemaculatus* 8296
- feeding behavior, food conversion, host plants, *Hyalophora cecropia* 5970
- food preferences, herbivores, *Spodoptera eridania* 4602
- food quality, nutrient utilization, *Dicranotrops hamata*, *Elymana sulphurella*, *Eucelis incisus*, *Zyginidia scutellaris* 3547
- gallic acid, coumarin effects on, antifeedants, *Spodoptera littoralis* 7345
- inhibition, brain centers, *Labidura riparia* 479
- longevity, microwave radiation effects on, *Apis mellifera* 7502
- Nomuraea rileyi* infection effects on, *Heliothis zea* 9134
- nuclear polyhedrosis virus effects on, larvae, *Spodoptera litura* 275
- polythetism, *Nomuraea rileyi*, *Heliothis virescens* 9006
- predation, *Coccinellidae*, *Acyrtosiphon pisum* 2875
- predatory behavior, *Helix aspersa*, *Portholella antipodiana* 9121
- predatory behavior, population density, predators, *Phytoseiulus persimilis*, *Amblyseius degenerans* 4466
- roots, larvae, *Heterocyrtus arator*, *Paspalum dilatatum*, *Lolium perenne*, *Trifolium repens* 487
- secondary production, *Purpuriclypeus cardis*, *Diplectrona modesta*, USA, Georgia 2291
- work, environmental effects, *Hylotrupes bajulus* 2000
- workers, colonial characteristics, *Solenopsis invicta* 1991
- Food contamination**, fishery products, infestation, salts effects on, *Suidasia medianensis* 2949
- Food conversion**, efficiency, food plants, *Spodoptera littoralis*, Ghana 2849
- efficiency, nymphs, *Loxusia migratoria* 4991
- energy budget, production, efficiency, honey, *Apis mellifera* 873
- feeding behavior, host plants, food consumption, *Hyalophora cecropia* 5970
- feeding, leaves, host plants, *Pieris brassicae* 6746
- feeding, pests, forests, *Gilpinia berceyniae* 7696
- food preferences, food plants, genotypes, *Sitophilus oryzae*, *Zea mays* 8544
- gallic acid, coumarin effects on, antifeedants, *Spodoptera littoralis* 7345
- gallic acid effects on, rutin, *Acetia domesticus* 3484
- nutrition, bibliographies, *Insecta* 4757
- pathogenicity, *Nomuraea rileyi*, *Heliothis virescens* 9006
- Zapada oregonensis*, *Zapada cinctipes*, *Carpina confusa*, USA, Colorado 3855
- Food intake**, control, mechanoreceptors, *Culiseta inornata* 3312
- Food intake, (continued)** foraging behavior, colonial characteristics, *Camponotus vagus* 2271
- magnetics, effects on development, reproductive systems, larvae, *Scotia segetum* 7442
- Food organisms**, anti-predator behavior, *Collembola*, *Acarina* 498
- Arthropoda, *Selapsophorus platycercus* 571
- attractants, effects on reproductive behavior, *Sitotroga cerealella* 424
- bioaccumulation, mercury, larvae, *Diptera* 2620
- biomass, food preferences, *Misumena vatia* 457
- Chrysomphalus anonidum*, predators, new species, *Sukunahikona popei*, India 3180
- colonies, predation, *Megaponera foetens*, colonies 2109
- coloration, predation effects on, *Acan*, *Pisces* 6228
- diets, effects on development, oviposition, *Cadiastethus nazarens* 6651
- diets, effects on longevity, fecundity, *Amblyseius gossipi* 7603
- diets, effects on phenotypes, *Leptothorax* 3573
- diets, *Peuceitia viridans* 9122
- Drosophila*, growth, *Humbertiella similis* 7434
- effects on flight activity, *Scarabaeidae*, *Taenia saginata*, Kenya 1317
- effects on growth, fecundity, *Phthorimaea operculella*, *Solanum tuberosum* 539
- effects on larvae development, *Atherigona soccata*, *Sorghum* 358
- Elleusine indica*, feeding behavior, food preferences, *Spodoptera frugiperda* 3566
- escape behavior, webs, *Lepidoptera*, *Araneida* 454
- feeding behavior, burnt ground, heaths, *Hepalus juveniles*, *Pyrrhocorax pyrrhocorax* 6827
- feeding behavior, life cycle, *Ceraclea nigronervosa*, *Spongilla lacustris*, Norway 5429
- feeding behavior, *Musca striata*, *Inachis* io 6823
- feeding behavior, predation, *Limnognathus nitidus*, *Nilaparvata lugens* 8618
- feeding behavior, *Sceliphron madraspatanum conspiciatum*, *Arachnida* 2806
- feeding, *Clemensia albata*, *Proctococcus viridis* 7509
- feeding, developmental stages, *Allium oleraceum*, *Hydroecia nordstroemi* 3255
- food availability effects on feeding behavior, *Drosophila melanogaster*, *Sarracenia purpurea* 1255
- food preferences, *Nicotellidae* 496
- food preferences, oviposition, *Thanasis dubius* 6014
- food preferences, *Toxothrypanites theobaldi*, *Aedes aegypti*, *Culex fatigans* 494
- food quality, effects on larvae growth, *Hydropsyche* 396
- immature stages, *Chironomidae*, *Oncorhynchus kisutch* 2131
- labelling, tyrosine metabolism, measuring techniques, *Aedes aegypti* 170
- larvae, *Spodoptera exempta*, *Cocos nucifera* 478
- nest provisioning, overwintering, *Gryllus veletis*, *Liris argentata* 3623
- nest provisioning, variability, *Craob advena* 438
- nutritive value, effects on growth, reproduction, *Myzus persicae*, *Aphidoletes aphidimyza* 5678
- pests, biological control, *Hypera postica*, *Sitona hispidula* 612
- physical properties, effects on feeding behavior, *Lymantria monacha* 491
- population density, larvae, *Opeirophora brumata*, British Isles, Mainland 565
- predation, activity patterns, *Coptotermes eschepensetensis*, *Tetranychidae* 6847
- predation, diets, lakes, *Polycelis nigra*, *Insecta* 1487
- predation efficiency, *Macroleon quinquemaculatus*, *phleide* 2804
- predation, *Nabis alternatus*, *Phyllotreta cruciferae* 8368
- predation, *Orthetrum austeni*, *Lepidoptera* 4437
- predation, *Plecoptera*, Aves, USA, Michigan 6820
- predator-prey interactions, feeding behavior, *Nabis americanus*, *Spodoptera exigua*, *Lygus hesperus* 5927
- predator-prey interactions, Hemiptera, *Lepidoptera* 7866
- predators, *Arthropoda* 1197
- predators effects on, biological control, *Chernes climacoides* 1265
- predatory behavior, *Folsomia candida*, *Serrastroma serrula* 7533
- predatory behavior, *Neotamias vittipes* 8250
- seasonal variations, *Insecta*, *Cyprinidae* 620
- softwoods, decay fungi effects on, *Coptotermes acinaciformis* 1196
- survival, body size effects on, predation, *Olios*, *Eleutherodactylus coqui* 1293
- Tinninermes*, *Proteles cristatus*, *Namibia*, *Namib Desert* 9193
- Food plants**, abundance, geographical distribution, *Asclepias syriaca*, *Danaua plexippus*, USA, Wisconsin 7566
- Acacia ingramii*, larvae, *Janus evagoras*, Australia, New South Wales 2093
- aggregation, *Pyronia tithonus* 9093
- antifeedants, *Amlyridioideae*, *Schistocerca gregaria* 7348
- antifeedants, biological properties, feeding behavior, herbivores, *Insecta* 8294
- antifeedants, *Hymenocallis littoralis*, *Schistocerca gregaria* 7531
- association, development, *Buculatrix cidarella*, *Mynca gale* 9159
- diets, effects on physiology, nutrition, *Spodoptera eridania* 5677
- diets, *Maemestra oleracea*, Europe 9156
- effects on growth, development, *Diacrisia obliqua* 7734
- effects on growth, development, pests, *Callosobruchus maculatus* 7737
- effects on, growth, development, *Sitotroga cerealella* 379
- effects on growth, food conversion efficiency, *Spodoptera littoralis*, Ghana 2849
- effects on longevity, fecundity, *Pterohelaeus darlingtoni*, *Pterohelaeus alternatus* 7510
- effects on molting, mortality, larvae, *Diacrisia obliqua* 7561
- effects on susceptibility, fumigants, stored product pests, *Callosobruchus chinensis* 7672
- feeding behavior, *Coleidae*, 11 species, Costa Rica, Guanacaste Province 2801
- feeding behavior, water content, food preferences, *Atta cubica* 2005
- flowering, effects on emergence, diapause, *Megastigmus specularis*, *Megastigmus spermatophorus* 5995
- food preferences, *Amphipyra pyramidea*, *Amphipyra berbera* *svenssoni* 4338
- food preferences, *Cucurbitaceae*, *Aulacophora foveicollis*, *Aulacophora atripennis* 9167
- food preferences, feeding, *Pupilio* 8305
- food preferences, genotypes, *Sitophilus oryzae*, *Zea mays* 8544
- food preferences, growth, development, *Callosobruchus chinensis* 7433
- food preferences, *Hemadus truncorum* 4453
- food preferences, larvae, *Lepidoptera* 2845
- forests, pest control, *Insecta*, *Pinus sylvestris*, *Pinus pallasiensis* 7690
- geographical distribution, British Isles, *Melanogaster galathea* 9091
- head capsules, growth, morphology, *Spodoptera litura* 7468
- host preferences, *Leguminosae*, *Myzus persicae*, *Acyrtosiphon kondoi*, *Aulacorthum solani*, *Acyrtosiphon pisum* 6945
- host preferences, *Papilio glaucus canadensis* 3595
- infection, potato leaf roll virus, effects on longevity, fecundity, *Leptinotarsa decemlineata* 7440
- larvae, associations, cocoons, *Callosamia promethea*, USA, Michigan 2070

Subject Index

Food plants, (continued)

- life history, sympatric populations, Papilionidae, Brazil 5233.
morphology, taxonomy, new subspecies, *Gloveria medusa* edita, USA, California 7226.
nutrients, phenols, herbivores, *Anacidium melanorhodon* 7308.
oviposition, larvae survival, *Anthocharis cardamines*, *Alliaria petiolata* 5954.
Pennisetum setosum, *Erythrina polyzona polyzona* 8874.
phylogeny, Rhopalidae 8671.
pollen, Meliponinae, surinam 5196.
Prestonia isthmica, *Doryphora punctatissima* 1982.
Sturmia convergens, parasitism, *Danaus plexippus*, size 2068.
substrate preferences, feeding, *Aphis fabae*, *Acyrtosiphon pisum*, *Vicia faba* 5925.
suitability, effects on, survival, development, *Nezara viridula* 361.
survival, development, *Triolophia annulata* 2836.
survival, development, *Triolophia annulata* 5201.

Food preferences

- Amara aenea*, *Anisodactylus sanctaeacris*, *Harpalus affinis*, *Stenolophus comma*, *Pterostichus melanarius* 4355.
Arthropoda 1197.
associations, host plants, cannibalism, larvae, *Diadris obliqua* 1209.
biotypes, genetics, selection, *Nilaparvata lugens* 2340.
Chaoborus trivittatus, larvae, prey size, *Daphnia pulicaria* 2001.
colonies, oils, *Solenopsis invicta* 1992.
Dannae, Solomon I. 8304.
diets, larvae, Tipulidae, USSR 6738.
ecological distribution, habitat preferences, association, *Drepanotermes*, Australia 836.
ecological distribution, shores, Ephyridae 622.
feeding behavior, adults, *Alnus rubra*, *Rhinosisus viridacens*, Canada, Britns 1269.
Columbia, Vancouver I. 2769.
feeding behavior, food plants, water content, *Atta columbica* 2005.
feeding behavior, host plants, *Loxostege commixalis* 1994.
feeding behavior, Nicotelliidae 496.
feeding behavior, *Sceliphron madraspatanum conspiciendum*, Arachnida 2806.
feeding behavior, *Toxorhynchites theobaldi* 494.
feeding, *Chrysomela scripta*, *Populus* 8305.
feeding ecology, algae, *Scutella pila* 3869.
food availability, *Scaptomyza aeneus*, *Scaptomyza* 2008.
food consumption, herbivores, *Spodoptera eridania* 4602.
food organisms, feeding behavior, *Spodoptera frugiperda*, *Euleia indica* 3566.
food plants, *Amphipyra pyramidea*, *Amphipyra berbera* svenssoni 4338.
food plants, Cucurbitaceae, *Aulophora foveicollis*, *Aulophora atripennis* 9167.
food plants, *Scutellaria*, *Sitophilus oryzae*, *Zea mays* 8544.
food plants, growth, development, *Callosobruchus chinensis* 7433.
food plants, *Herades truncorum* 4453.
food plants, larvae, *Lepidoptera* 2845.
gustatory stimuli, urea, sugars, *Camponotus compressus* 8301.
host plants, chemotaxis, *Choristoneura fumiferana* 5161.
host plants effects on, *Misumena vatia* 457.
host plants, *Schistocerca gregaria*, *Pteridium aquilinum* 1245.
larvae, *Popillia japonica* 490.
morphology, taxonomy, *Australophloeotomus* 3195.
morphology, *Thanosimus dubius* 6014.
pests, genotypes, *Zea mays*, *Sitophilus oryzae* 4358.
pollen, colonies, *Apis mellifera*, Canada, Alberta 2010.
predation, *Dendroctonus frontalis*, *Corticus glaber*, *Corticus parallelus* 2797.
predators, feeding behavior, *Mariposa tigrina*, Insecta 1208.
predatory behavior, *Lepidoptera*, *Argiope bruennichi* 5171.
prey, *Stictia carolina* 5165.
salts, chemoreception, reproduction, females, *Phormia regina* 7296.
seasonal variations, Cyprinidae, Insecta 620.
seasonal variations, *Gnathoderes tubiformans*, USA, Texas 482.
seasons, feeding behavior, *Pogonomyrmex ruginosus*, *Vermoseris pergande* 2805.
softwoods, decay fungi effects on, *Copiotermes aciciformis* 1196.
specialization, food composition, saccharides, *Apis mellifera* 1998.
substrate preferences, foraging behavior, yeasts, *Drosophila mojavensis* 4342.
trophic status, community composition, Syrphidae, British Isles 3617.
webs, *Matopha dzydeani* 1949.
Zapada oregonensis, *Zapada cinctipes*, *Capnia confusa*, USA, Colorado 3855.

Food quality

- determination, methodology, infestation, Insecta 3735.
effects on larvae growth, *Hydropsyche* 396.
food consumption, nutrient utilization, *Dicranotus hamata*, *Elymana sulphurella*, *Eucelis incisus*, *Zygmidia scutellaris* 3547.
leaves, host plants, mortality, *Zanthoxylum ailanthoides*, *Papilio xuthus* 7533.
stored products, pests effects on, *Acarus* 30 2202.

Food selection

- defoliation, *Vernonia patens*, *Pericopsis leucophaea*, Costa Rica 5164.
host plants, geographical variations, sympatry, speciation, *Apidae* 1544.
predator-prey interactions, *Phrynosoma platyrhinos*, *Pogonomyrmex californicus*, USA, Nevada 2145.
prey, predatory behavior, *Agonum dorsale* 8299.
prey, predatory behavior, *Pardosa vancouveri* 4349.

Food sources

- alkaloids sequestering, *Danaeae*, Solomon I. 8304.
availability, community composition, *Bombus*, Finland 4476.
chemical communication, foraging behavior, colonial characteristics, *Formica polyctena* 3841.
competition, forests, clear cutting effects on, *Carabus limbatus*, *Carabus sylvestris* 8367.
competition, interspecific relationships, *Phyllotreta stolata*, *Phyllotreta cruciferae*, *Pteris rapae* 6829.
diets, *Monopis spilotella*, *Archinemapogon latereus*, *Nemopogon picarellus*, Finland 7532.
display, wagtail dance, orientation, sky, *Apis florea* 8267.
distribution, colonial characteristics, *Solenopsis invicta* 2274.
effects on trapping efficacy, *Blattella germanica* 3248.
food availability, competition, pollinators, *Bombidae* 6822.
foraging behavior, niche pattern, *Bombus terrestris*, *Bombus lapidarius* 6835.
homing behavior, landmarks, foraging behavior, *Apis mellifera* 5113.
infestation, fruits, *Caulophorus oryzae* 6137.
larvae competition, effects on life history, *Musca autumnalis* 1274.
leaf litter decomposition, tree holes, *Aedes triseriatus*, USA, Indiana 9377.
man, amino acid composition, *Schistocerca gregaria* 1752.
mutualism, plant communities, tropical environment, *Formicidae* 4399.

Food sources, (continued)

- orientation, locomotor activity, foraging behavior, *Rhodnius prolixus* 5926.
pollen, *Osmia scutellum*, USA, Utah 9101.
pollination, *Thupa occidentalis*, *Apis mellifera*, USA, Connecticut 4400.
population density, effects on feeding behavior, *Phytoseiulus permilms*, *Amblyseius degenerans* 1206.
population density, effects on feeding behavior, predation, *Phytoseiulus permilms*, *Amblyseius degenerans* 1205.
rearing, seeds collection equipment, *Oncopeltus fasciatus* 8025.
recruitment, chemical communication, pheromones, *Tetranormus imparum* 3840.
speciation, sympatric populations, niche pattern, *Drosophila*, Australia 5496.
utilization, alcohol dehydrogenase, aldehyde oxidase, activity, *Drosophila* 5695.
- Food utilization**
enzyme activity, *Oxyrhachis tarandus*, *Oxycaenus hyalinipennis* 7320.
feeding, *Homoptera* 6747.
feeding, insecticides effects on, host plants, *Acacia janata*, *Ricinus communis* 7412.
metabolism, carbohydrates, *Oxyrhachis tarandus*, *Oxycaenus hyalinipennis* 7309.
metabolism, sugars, *Oxyrhachis tarandus*, *Hyalinipennis* 7321.
Nomuraea rileyi, infection effects on, *Heliothis zea* 9134.
- Forage**
production, environmental impact, coprophilous organisms, *Geotrupes*, *Cynodon dactylon* 1252.
- Foraging behavior**
Acontium columbianum flowers, energy intake optimization, *Bombus*, USA, Rocky Mts. 4345.
activity patterns, males, *Plebeia dryanra* 9462.
annual variations, environmental factors, *Odonotermes wallonensis*, India 4347.
anti-predator behavior, interspecific relationships, *Latrodectus hesperus*, *Pogonomyrmex ruginosus* 6731.
anti-predator behavior, intraspecific relationships, freshwater environments, *Notoseia hoffmanni* 7819.
carrion location, colonization, *Nicrophorus carolinus* 5924.
chemical perception, attractants, effects on pollinators, *Apis mellifera* 4577.
Cicindela ocellata reutilaria, USA, Texas 9118.
circadian rhythms, seasonal variations, *Atta insularis* 6737.
cleptoparasitism, colonies, *Melipona rufiventris* (layolensis) 6743.
colonial characteristics, chemical communication, food sources, *Formica polyctena* 3841.
colonies, competition, spatial distribution, *Pogonomyrmex badius* 2006.
competition, nectar, *Phaethornis*, *Trigona ferruginea*, Panama 4409.
competition, niche overlap, *Indomyrmex pruinosus*, *Myrmecocystus mumicus*, *Myrmecocystus depilis* 5990.
continuous reinforcement, flowers, *Bombus edwardsi* 3543.
crop fields, tenvalerate effects on, *Apis mellifera* 4475.
development, environmental conditions, *Idotes minus*, Eire 5898.
diets, coexistence, *Holcophylla abdominalis*, *Holcophylla calia*, USA, Maryland 6029.
diets, functional morphology, tongue length, *Syrphidae* 5922.
ecological distribution, colonies, *Pseudeis lamia*, USA, Texas 6986.
energetics, *Heliantus annuus* pollen, *Apidae* 6735.
feeding behavior, colonial characteristics, *Camponotus vagus* 2271.
flight activity, microwave radiation effects on, *Apis mellifera* 5877.
flowers, chemical communication, scent marking behavior, *Bombus vosnesenskii* 1925.
flowers, prairies, *Hymenoptera*, USA, Wyoming 3564.
food selection, *Phrynosoma platyrhinos*, *Pogonomyrmex californicus*, USA, Nevada 2145.
food selection, prey, *Agonum dorsale* 8299.
food sources, niche pattern, *Bombus terrestris*, *Bombus lapidarius* 6835.
food sources orientation, locomotor activity, *Rhodnius prolixus* 5926.
homing behavior, landmarks, food sources, *Apis mellifera* 5113.
honey production, comparison, strains, *Apis mellifera* 4595.
host plants, *Bombus* 2050.
honey abundance, predator-prey interactions, *Coccinella californica*, *Acyrtosiphon pisum* 2872.
interspecific relationships, flowers, *Bombus*, *Syrphidae* 2115.
life cycle, *Cataglyphis sabulosa* 9114.
nest building, rhythms, *Herades truncorum* 4458.
nesting behavior, *Agapostemon virens* 1946.
nests, social behavior, *Dorylineae* 5425.
optimization, nectar reinforcement effects on, *Bombus sandersoni*, *Vespa* 2049.
optimization, sex ratio, *Vespa* 6819.
orientation, navigation behavior, *Apis mellifera* 5865.
pheromones, polythetic behavior, *Nasutitermes corniger* 6685.
pollen attractancy, *Apis mellifera* 8302.
pollen, diurnal variations, *Apis mellifera*, *Zea mays* 5923.
pollination, humidity effects on, *Apis mellifera*, *Zea mays* 2046.
pollinators, *Aralia hispida*, *Bombidae* 8346.
pollinators, *Brassica oleracea capitata* crop fields, Insecta 5297.
pollinators, *Diadasia afflicta*, USA, Texas 9358.
pollinators, effects on reproduction, outcrossing, *Cochlospermum vitifolium*, *Centris*, Panama 6787.
pollinators, interspecific relationships, *Trifolium pratense*, *Bombus* 5195.
pollinators, mathematical models, *Diglossa purpurea*, *Bombus* 5920.
pollinators, nectar dispersion, *Impatiens capensis* 6793.
pollinators, plasticity, *Bombus bifarius*, *Bombus navifrons* 6736.
predation, energetics, habitat variation, *Argiope trifasciata*, *Araucaria trifolium* 8297.
predation, larvae, *Coccinella trifasciata*, *Coccinella californica*, *Coccinella undecimnotata*, *Cycloneda polita* 2869.
predation, *Megaponera foetens* 2109.
predation, population density, spatial distribution, prey, *Phytoseiulus permilms*, *Amblyseius degenerans* 4350.
predation, prey population density, *Coccinellidae* 6739.
predator-prey interactions, Insecta, *Parulidae* 4421.
predator-prey interactions, larvae, *Chrysopa carnea*, *Hippodamia convergens* 2870.
predators, food consumption, energy intake, *Macroleon quinquecalanus* 8296.
resource partitioning, colonies, *Pogonomyrmex owyhee*, USA, Idaho 5915.
resource utilization, niche breadth, cases, *Bombus*, Sweden 4489.
Rhododendron pollen, honey toxicity, case reports, *Apis mellifera*, Nepal 5321.
scent marking behavior, *Apis mellifera* 5869.
seasonal variations, nectar, pollen, *Apis mellifera* 5320.
social behavior, *Staphylinidae* 5558.
strategy, webs, site location, *Araneidae*, *Linyphiidae* 5170.

Foraging behavior, (continued)

substrate preferences, food preferences, yeasts, *Drosophila melanogaster* 4342
territory, spatial variations, temporal variations, *Myrmecocystus ruginervis* 1999
visual communication, dialects, range, *Apis mellifera carnica*, *Apis mellifera ligustica* 5118
workers, fungus gardens, colonial characteristics, *Macrometres michaelsoni* 2266
workers recruitment, pheromones, *Myrmica rugulosa* 5169.

Forcipia leca

feeding effects on, *Festuca* 2069
feeding, infestation, effects on host plants, *Festuca arundinacea* 2086
host preferences, population density, grasses 710
infestation, effects on plants growth, *Festuca arundinacea* 2087

Forcipomyia

environmental effects, shade, breeding sites, effects on pollination, *Theobroma cacao* 4267
keys, morphology 8796

pollinators, new species, taxonomy, morphology, keys 8054

Forcipomyia creesi

new species, South Africa, Transvaal 8796

Forcipomyia likinae

new species, South Africa, Transvaal 8796

Forcipomyia lecondesurorum

new species, South Africa, Transvaal 8796

Forcipomyia letabanus

new species, South Africa, Transvaal 8796

Forcipomyia roseae

new species, South Africa, Transvaal 8796

Forcipomyia taiwana

activity patterns, China, People's Rep 1575

Forcipomyia tianshanus

feeding behavior 499

Forcipula trispinosa

karyotypes, evolution 9407

Foreign bodies

hemolymph, cells, binding, *Bombyx mori* 4148

Forest

population-environment relations, Heteroptera, Czechoslovakia 2139

Forest floor

leaf litter, association, Collembola, Mexico 2167

litter, abundance, clear cutting effects on, Arthropoda 2111

litter, decomposition, nutrients, Arthropoda 2114

litter, winter survival, *Anthonomus grandis*, USA, Mississippi 614

Forest management

pest control, cost-benefit analysis, *Lymantria dispar* 734

pest control, viruses, Insecta 1386

pests protection, Insecta, Germany, Fed Rep 1392

Forestry

pest control, ethylene dibromide, *Dendroctonus ponderosae* 9342

pest control, Insecta 9151

pests, surveys, Insecta, Denmark 5308

resource management, pest control, research programs, Insecta 5323

Forests

abundance, community composition, Isoptera, Nigeria 4460

activity patterns, seasonal variations, Carabidae, USSR 6716

adults, population dynamics, spatial distribution, seasonal variations, *Monochamus alternatus* 4428

canopies, community composition, nutrient content, Arthropoda, USA, North Carolina 2144

carion, feeding behavior, Formicoidae, USA, East 4361

clear cutting, effects on competition, food sources, *Carabus limbatus*, *Carabus sylvestris* 8367

colonization, environmental conditions, soil properties, Formica yessensis, Korea, Rep., Gyeongsang-Nam-Do 4438

community composition, clear cutting effects on, Araneae, USA, Appalachian Mts. 6042

community composition, stability, Carabidae, France 6824

community structure, infestation effects on, *Dendroctonus frontalis* 3600

community structure, seeds dispersal, Formicidae 3602

community structure, succession, Arthropoda, USA, Arizona 6854

damage, defoliation, factors affecting, *Orgyia pseudotsugata* 1249

dung utilization, Uroxya gorgon, Notiobia parilis, Panama 8370

fires, environmental change, effects on species composition, Carabidae 6840

habitat, ecology, geographical distribution, Coleoptera, Sweden, Abisko 4424

habitat, occurrence, Formica rufa, France, Alsace 9466

habitat preferences, resting behavior, *Glossina palpalis*, Mali 436

infestation, mortality, *Choristoneura fumiferana*, *Abies balsamea*, Picea glauca, Canada, Quebec 3036

leaf litter, community composition, Uropodidae, Romania 6006

nests, geographical distribution, environmental effects, Formica rufa, France 6850

nutrient cycles, ecophysiology, phytophagous Insecta 7593

occurrence, new records, Thysanoptera, Israel 9479

parasites infestation, mathematical models, *Dendroctonus frontalis* 683

pest control, biological control, *Abies balsamea*, *Choristoneura fumiferana*, *Bacillus thuringiensis* 8472

pest control, Enapholodes rufus, USA, Ohio 2209

pest control, food plants, Insecta, *Pinus sylvestris*, *Pinus pallasiensis* 7690

pest control, Insecta, China 2216

pest control, integrated control 4561

pest control, predators, Aves, *Operophtera brumata*, *Tortrix viridana* 3037

pest outbreaks, climate effects on, *Dendroctonus frontalis* 2961

pests damage, *Choristoneura fumiferana*, Canada 3779

pests, development, *Dasineura laricus*, USSR, Siberia 6940

pests, feeding, food conversion, *Glinipha beryciniae* 7696

pollution effects, antimicrob, pesticide applications, activity, Arthropoda 9212

pollution effects, sulfur dioxide, chemoreception, host plants, pests, Insecta 5132

population dynamics, abundance, biomass, seasonal variations, *Palomena prasina*, Czechoslovakia 1283

predators effects on community composition, Arthropoda, *Myrmotherula fulviventris* 4467

soil, community composition, insecticides effects on, Arthropoda, USA, California 5149

soil fauna, community composition, environmental factors, Acari, India, Kashmir 7009

soil, leaf litter, abundance, Cryptostigmata, Mesostigmata, Australia 2881

soil, leaf litter, distribution, Cryptostigmata, Mesostigmata, Australia 4472

Forests, (continued)

soil, nuclear polyhedrosis virus survival, transmission, *Orgyia pseudotsugata*, USA, California 280

soil, pesticide residues, toxicity, *Musca domestica* 2656

soil, population dynamics, abundance, community composition, Acari 6000

species composition, population dynamics, Branchytera, Cyclorhapha, Czechoslovakia 7101

species diversity, abundance, Araneida, Czechoslovakia 613

streams, acid rain, occurrence, *Siphonurus lacustris*, Heptagenia lateral, British Isles, Scotland 8607

succession, vegetation patterns, community composition, Araneae 9180

tropical environment, seeds, predation, Phaidole, Costa Rica 7604

Formica auricularia

food preferences 1197

geographical distribution, Erie 7890

prev, urban environments, *Ernaceus concolor*, Czechoslovakia, Brno 5987

Formica ibérica

new species, taxonomy, morphology 2406

Formation

galls, host plants, Insecta, Sweden 7558

Formenolabis alghana

new genera, new species, morphology 2406

Formica

effects on population genetics, pollen dispersal, *Diamorpha smallii* 553

mutualism, *Pubilia concava*, *Solidago altissima* 2073

Formica cucularia

aggressive behavior, attack, Formica lugubris 3849

colonies, aggressive behavior, interspecific relationships, intraspecific relationships, Formica lugubris 5159

Formica fusca

cells, hemolymph 6542

pseudogynes, pathology, morphology, parasitism 8164

Formica haemorrhoidalis

competition, nests, displacement, *Camponotus laevigatus* 6855

Formica lugubris

aggressive behavior, attack, Formica cucularia 3849

Formica neoclara

temperature effects on activity patterns, abundance, association, Aphis fabae, USA, Colorado 6863

Formica obscuripes

environmental effects, stress, population structure, castes 1304

Formica polyctena

colonial characteristics, foraging behavior, chemical communication, food sources 3841

Formica rufa

nests, geographical distribution, environmental effects, forests, France 6850

occurrence, habitat, forests, France, Alsace 9466

workers, morphology, keys, identification, Sweden 4106

Formica ruga

cells, hemolymph 6542

Formica sanguinea

ovary development, workers 3505

Formica schaufussi

effects on population genetics, pollen dispersal, *Diamorpha smallii* 553

pollination, host plants association, *Diamorpha smallii* 5251

Formica subsericea

effects on population genetics, pollen dispersal, *Diamorpha smallii* 553

mutualism, abundance effects on survival, *Vanduzeeia arguta* 6749

nesting behavior, colonial characteristics, movements 7004

Formica yessensis

colonization, environmental conditions, forests, soil properties, Korea, Rep., Gyeongsang-Nam-Do 4438

nests, site location, seasonal variations, Korea, Rep., Gyeongsang-Nam-Do. 4448

Formicaphagus grallariae

synonymy, taxonomy, Formicaphagus rhamphasti 3225

Formicaphagus rhamphasti

synonymy, taxonomy, Formicaphagus grallariae 3225

Formicidae

abundance, species composition, habitat, India, Bisthenhatti 5257

anti-predator behavior, defensive behavior, Myrmecolon 6836

association, defense mechanisms, diets, Lycaenid 1180

association, interspecific relationships, *Harknessia titus*, *Glaucopteryx lydamas*, *Celastrina argiolus* 7600

check lists, geographical distribution, Korea 3146

chemical control effects on association, *Diatraea saccharalis* 609

chemical control, pest control, bait toxicity 2991

colonies, dispersal, spatial distribution, Panama 4649

colonization, water reservoirs, littoral zone, Australia 9174

community composition, species diversity, USA, South Carolina 1269

community structure, orchards, pest control effects on, *Aonidiella aurantii* 2879

environmental factors, honeydew, secretions, larviposition, Aphis craccivora 7357

feeding behavior, mathematical models 2799

feeding, competition, succession, diet variations, species composition, Turkey 6744

host plants, symbiosis, nutrients, Cecropia 4398

morphology, reproductive organs, males, phylogeny 3456

mutualism, Cecropia monostachya, Ecuador 5208

mutualism, plant communities, food sources, tropical environment 4399

myrmecophily, mutualism, plant communities guilds, USA, West Virginia 2837

nesting behavior, host plants, *Cibadum microcephalum* 4396

nests, symbiosis, species composition, Diplodora 8382

pest control, repellents, buildings 5378

population genetics, models, colonies, polymorphism, sex ratio 3923

predators, biological control, pest control, *Laphygma exigua* 5368

predatory behavior 9127

repellents, defense mechanisms, colonial characteristics, *Polistes fuscatus* 6984

seeds dispersal, effects on community structure, forests 3602

slavery, adaptiveness, fitness 1478

species composition, species richness, association, plant communities, Costus, Panama 8344

surveys, species composition, Mongolia, People's Rep. 8678

Formicoidea

feeding behavior, carion, forests, USA, East 4361

Formicomus millerianus

taxonomic revision, synonymy, Formicomus muelleri 4803

- Formicomus muelleri**, taxonomic revision, synonymy, *Formicomus millerianus* 4803.
- Formicomus nitidulus**, social organization, sexual behavior, karyotypes 2285.
- Formosa**, new species, morphology, Setenis 1610.
- Formosa**, taxonomic revision, morphology, Trypoxylon 4884.
- Forma**, visual discrimination learning, *Apis mellifera adansonii*, *Melipona quadrifasciata anthidioides*, *Melipona rufiventris* 5123.
- Formulations**, pathogenicity, soil characteristics effects on, pest control, *Bacillus thuringiensis israelensis*, *Culicidae* 7671.
- Fossils**, amber, Entomophthora, Dominican Republic 5539.
- Fossils**, host plants, leaf miners, miocene, *Mahonia reticulata* 4751.
- Fossils**, morphology, taxonomy, Trigonidomacra, Dominican Republic 6335.
- Fossils**, nests, Pleistocene epoch, Hodotermitidae, South Africa, Clavicornius 5540.
- Fossils**, new species, oviparity, Tertiary, *Elektraphis lindrothi* 792.
- Fossils**, Oligocene epoch, Insecta, USA, Colorado 3168.
- Fossils**, paleoecology, plants, Insecta, USA, Minnesota 791.
- Fossils**, paleoenvironments, community composition, Insecta, Norway 4750.
- Fossils**, paleontology, taxonomy, synonymy, Pleistocene epoch, USA, California, Scarabaeidae 2404.
- Fossils**, taxonomy, morphology, Keroplatidae, Mycetophiloidae, France 1623.
- Fossils**, wings, morphology, Cretaceous period, Phasmida, Greenland 4752.
- Founders effect**, population genetics, morphology, polymorphism, *Eurytemora affinis* 4462.
- Fractionation**, ribosomal proteins, electrophoresis, mitochondria, *Locusta migratoria* 3265.
- Fragaria**, damage, infestation, pests, *Tetranychus urticae* 6200.
- Fragaria ananassa**, pest resistance, breeding, genetic factors, *Tetranychus urticae* 554.
- Fragaria vesca**, crop fields, abundance, pest control, *Ctenopseus obliquus*, *Epiphyas postvittana*, *Planotortrix excessana* 3816.
- Fragaria vesca**, crop yield, pests effects on, *Tetranychus urticae* 3776.
- Fragaria vesca**, growth, photosynthesis, infestation effects on, *Tetranychus urticae* 6163.
- Fragaria vesca**, infestation, photosynthesis, transpiration, primary production, *Tetranychus urticae* 2060.
- Fragmentation**, DNA, aging, *Drosophila melanogaster* 4239.
- Fragments**, wing discs, regeneration, *Drosophila* 3467.
- France**, apiculture 9330.
- France**, community composition, stability, forests, Carabidae 6824.
- France**, fauna, systematics, Limonidae 4728.
- France**, fossils, taxonomy, morphology, Keroplatidae, Mycetophiloidae 1623.
- France**, geographical distribution, ecology, *Euchorthippus* 9108.
- France**, geographical distribution, habitat, Coleoptera 9470.
- France**, geographical distribution, occurrence, *Allopygus koenigi* 9458.
- France**, males, life cycle, Tabanidae 9113.
- France**, mating behavior, circadian rhythms, geographical variations, *Acrolepius assectella* 5107.
- France**, nests, geographical distribution, environmental effects, forests, *Formica rufa* 6850.
- France**, new species, taxonomy, morphology, *Pachybrachis alpinus* 8765.
- France**, new species, taxonomy, morphology, *Rhamphus* 8757.
- France**, new species, taxonomy, morphology, *Trichaphaenops raffaldianus* 8746.
- France**, occurrence, geographical distribution, *Leiodes kollari* 9472.
- France**, occurrence, geographical distribution, *Perlamus albiter* 9459.
- France**, occurrence, geographical distribution, *Polydorus inustus* 9457.
- France**, pathogens ecology, Aphididae, Entomophthoraceae 4213.
- France**, pathogens, infection, seasonal variations, Aphididae, Entomophthoraceae 4213.
- France**, pests, population dynamics, *Zeirapha diniana* 8450.
- France**, population studies, biometrics, morphology, *Apis mellifera ligustica*, *Apis mellifera caucasica* 8058.
- France**, seasonal variations, vertical distribution, annual cycles, *Labidostomus luteum* 7803.
- France**, taxonomy, morphology, Amara, Zezza 6498.
- France**, taxonomy, morphology, keys, Lagarus 8761.
- France, Alsace**, new species, taxonomy, morphology, *Trichogramma schuberti*, *Trichogramma rhenana* 4876.
- France, Alsace**, occurrence, habitat, forests, *Formica rufa* 9466.
- France, Brittany**, viruses, isolation, *Ixodes uriae*, *Ornithodoros maritimus* 4188.
- France, Cerdagne**, species composition, occurrence, Carabidae 9473.
- France, Coast**, habitat, ecological distribution, life cycle, dunes, *Psammodes porricollis* 5982.
- France, Corsica**, new species, taxonomy, morphology, *Paragus ascoensis*, *Paragus antoinettae* 8793.
- France, Lyon**, occurrence, Anopheles 1571.
- France, Midi-Pyrenees**, new species, *Porricondyla ramadei* 817.
- France, Neune R. Valley**, pest outbreaks, pollution effects, pest control, insecticides, temephos, Simulium ornatum 4546.
- France, Pyrenees**, collections, species composition, Coleoptera 9456.
- France, Pyrenees**, geographical distribution, new records, rivers, Chironomidae 819.
- France, Pyrenees Mts.**, check lists, species composition, Coleoptera 7075.
- France, Serignan**, check lists, species composition, Coleoptera 7074.
- Frankliniella occidentalis**, abundance, movements, agricultural practices effects on, crop fields 6198.
- Frankliniella**, synonymy, *Bolbothrips* 3233.
- Frankliniella bruneri**, taxonomy, morphology 1677.
- Frankliniella georgiensis**, new species, morphology, taxonomy, USA, Georgia 3233.
- Frankliniella inornata**, synonymy, *Frankliniella pseudotritici* 1677.
- Frankliniella insularis**, economic importance, effects on pollination, *Cajanus cajan*, Trinidad 737.
- Frankliniella keliae**, new species, taxonomy, morphology 1677.
- Frankliniella occidentalis**, pests, chemical control, ethyl formate 2939.
- Frankliniella pseudotritici**, synonymy, *Frankliniella inornata* 1677.
- Frankliniella schultzei**, vectors, disease transmission, tomato spotted wilt virus 6909.
- Fraseria carolinensis**, flowering, pollination, Apidae 6791.
- Fraxinus**, hosts, ectoparasites, *Proctiphilus fraxinifolius*, USA, Iowa 39.
- Fraxinus excelsior**, association, *Proctiphilus*, parasitoids, life cycle, *Ephedrus plagiator* 9142.
- Fraxinus**, hosts, parasites damage, *Brachynotocoris puncticornis* 32.
- Freezing**, cold tolerance, adaptations, Insecta, Antarctica 2730.
- Freezing**, cold tolerance, alpine environments, Oribatida, Austria, Alps 3553.
- Freezing**, cold tolerance, supercooling, metabolism, *Eurosta solidaginis* 4144.
- Freezing**, nitrogen, storage, semen, artificial insemination, viability, *Apis mellifera* 187.
- Freezing**, stress, fruit trees, pest control, pesticide applications, Insecta 1427.
- French Guiana**, malaria vectors, population dynamics, *Anopheles aquasalis* 3689.
- French Guiana**, new species, morphology, taxonomy, castes, *Lestrimelitta guyanensis*, Trigonidomacra 3220.
- French Guiana**, malaria transmission, *Anopheles darlingi* 636.
- Frenchia**, taxonomic revision, morphology, keys 3216.
- Frenchia banksiae**, new species, taxonomic revision, morphology 3216.
- Frenchia casuarinae**, morphology, taxonomy, keys 3216.
- Frenchia semioculata**, morphology, taxonomy, keys 3216.
- Frequenania atrata**, new species, taxonomy, morphology, South America 5587.
- Frequenania parvula**, new species, taxonomy, morphology, South America 5587.
- Frequency**, mating behavior, *Hylemyia antiqua* 8249.
- Frequency**, polymorphism, developmental stages, temperature effects, *Chaoborus americanus* 568.
- Frequency**, recombination, X chromosome mutation markers, *Drosophila melanogaster* 3104.
- Frequency**, physicochemical properties, geographical distribution, dunes, coastal zone, population structure, Odonata, Australia, Queensland 4457.
- Freshwater ecosystems**, larvae, check lists, streams, Trichoptera, Netherlands 1574.
- Freshwater environment**, longevity, life history, *Taeniosoma*, Cloon fluviale, Australia, Northern Territory, Magela Creek 4657.
- Freshwater environment**, oxygen depletion, indicator species, larvae, Ephemeroptera 3852.
- Freshwater environments**, colonization, flight activity, dispersal, Insecta 6230.
- Freshwater environments**, environmental surveys, species richness, species composition, Coleoptera, Hemiptera, British Isles, Norfolk Breckland 6234.
- Freshwater environments**, foraging behavior, anti-predator behavior, intraspecific relationships, *Notonecta* 7819.
- Freshwater environments**, geographical distribution, habitat, body size, case construction, Limnephilidae 7807.
- Freshwater environments**, littoral zone, habitat adaptations, reproductive strategy, *Scutella picea* 6861.
- Freshwater environments**, toxicity, pH, metals, *Orthocladus consobrinus*, *Limnephilus pallens*, Chironomus nigrus, Canada, Northwest Territories 6696.
- Freyana aasilina aasilina**, parasites, morphology, nymphs, adults 8030.
- Friesia**, morphology, taxonomy, Mexico 4820.
- Friesia albithorax**, new species, taxonomy, morphology, Lesser Antilles 6386.
- Friesia hoffmannorum**, new species, taxonomy, morphology, Mexico 4820.
- Friesia**, new species, taxonomy, morphology, Mexico, Morelos 8781.
- Friesia sublimis**, new records, geographical distribution, Mexico 8781.
- Friesia**, new records, Mexico 4820.
- Frogs**, nerves, sodium channels, *Centruroides suffusus* neurotoxins effects on 8175.
- Frogs**, water absorption, solutes concentration, *Arenivaga* 7352.
- Frontal ganglion**, electrical properties, 5-hydroxytryptamine, circadian rhythms, *Periplaneta americana* 8068.
- Frontalin**, pheromones channellers, attractancy, *Dendroctonus frontalis* 4313.
- Frontopylea frontalis**, migrations, environmental conditions 9147.
- Frontopylea tuoliensis**, new species, morphology, China, People's Rep. 44.
- Fructose**, hemolymph, comparative studies, hybrids, *Apis mellifera* 771.
- Fructose**, metabolism, *Oxyacarus hyalinipennis*, *Oxyrhachis tarandus* 7322.
- Fructose**, +triosephosphate isomerase, multienzyme complexes, purification, characterization, flight muscle, *Ceratitis capitata* 2574.
- Fruit bodies**, larvae association, fungi, Diptera 538.
- Fruit rot**, disease transmission, *Rhizopus artocarpus*, Insecta 2232.

Fruit trees.

- Citrus sinensis*, pest outbreaks, seasonal variations, *Araceus fasciculatus*, USA, Florida 4541
distribution, sampling methodology, *Aleuracanthus woglumi*, USA, Florida 1298
infestation, damage, *Carpomyia vesuviana*, *Dacus zonatus*, India 5332
pest control, pesticide applications, freezing stress, *Insecta* 1427
pest control, pesticide applications, methodology, *Insecta* 1423
pest control, pheromone traps, *Insecta* 2992
pest outbreaks, *Ceratitis capitata*, USA, California 3014
pest outbreaks, host plants, *Citrus*, *Araceus fasciculatus*, USA, Florida 4613
pests, biological control, *Aphytis lepidosaphes*, *Leptomastidea beckii*, Spain, Valencia 1458
pests, biological control, *Bacillus thuringiensis*, *Archips argyrospilus* 679
pests, life history, *Nippa lachus* pn, India 4554
pests, spatial distribution, host plants, microclimate, population levels, *Aonidiella auranti*, Greece, Crete 1256
ripening, effects on infestation, *Carica papaya*, *Dacus dorsalis*, USA, Hawaii 4616

Fruits.

- acetic acid, effects on oviposition rhythms, *Drosophila melanogaster* 2749
breeding sites, interspecific relationships, *Penicillium*, *Drosophila immigrans* 6051
damage, cytology, pests, *Malus*, *Tetranychus mcDanieli* 5403
galls, infestation, *Eriophyes prosopidis*, *Prosopis cineraria*, India 3591
infestation, pests, control, *Polyphagotarsonemus* 741
infestation, pests, food sources, *Caulophorus oryzae* 6137
oviposition, deterrence, unspecific relationships, *Rhagoletis basiola* 1920
Persea, pests, abundance, pest control, *Insecta* 1454
yield, pollination effects on, *Apis mellifera* 2186
- Frumenta aundinella**,
host-parasite interactions, reproduction, parthenocary, life history, *Solanum carolinense* 449
life cycle, host plants, *Solanum carolinense*, USA, Virginia 4329
oviposition, infestation, host plants flowering phenology effects on, *Solanum carolinense* 2839

Fulgoroidea.

- abundance, seasonal variations, plantations, USA, North Carolina 1313.

Fumigants.

- effects on fecundity, pesticide resistance, phosphine, pest control, *Tribolium castaneum* 7692
methyl bromide, resistance, metabolism, *Stotaphilus granarius* 1061
mortality, chemical control, *Anastrepha suspensa* 3444
phosphine, pest control, *Rhizophora dominica* 1044
susceptibility, stored products pests, food plants effects on, *Callosobruchus chinensis* 7672
toxicity, chemical control, *Acari* 1045
toxicity, methyl bromide, phosphine, 7 species, *Coleoptera* 1073
toxicity, productivity, comparative studies, *Stotaphilus oryzae*, *Tribolium castaneum* 1074.

Fumigation.

- antiallergic precocene 2(P2), effects on embryogenesis, *Dermacentor variabilis* 9344
carbon dioxide, toxicity, *Anastrepha suspensa* 1845
control programs, methodology, *Ceratitis capitata* 1422
effects on productivity, *Trogoderma granarium* 5763
methyl bromide, mortality, wood, *Ulmus*, *Scolytus multistriatus* 8491
ozone, chemical control, bluetongue virus vectors, biological safety cabinets, *Culicoides varipennis* 8477
pest control, *Insecta*, microwave radiation, botany specimens 2198
pest control, ozone, vectors, *Culicoides varipennis* 4519
pest control, soil, overwintering populations, *Leptinotarsa decemlineata* 2263
pests, stored products, methyl bromide, phosphine, *Tribolium castaneum* 6627
phosphine, pest control, stored products, *Insecta* 2241
phosphine, *Phoenix dactylifera*, mortality, *Insecta* 8535.

Function.

- cuticle lipids, permeability, *Anthropoda* 883
cuticle, reviews, *Isodidae*, *Argasidae*, *Nuttalliellidae* 5658
webs, predatory behavior, aquatic environment, *Wendilgarda* 1967.

Functional morphology.

- acaeagus, *Stegobium paniceum* 5808
cytology, accessory gland, *Dysdercus fasciatus* 3454
digestive tract, diets effects on, *Eyreponcenis alacris* 461
digestive tract, *Diplopoda* 161.
digestive tract, *Reduviidae* 158
dimorphism, pathogens, *Xenorhabdus*, *Galleria* 4189
elytra, respiration, *Coleoptera* 6539
epiphylls, *Lymantria dispar* 8006
filter feeders, hydrodynamics, larvae, *Simulium vittatum* 4353.
larvae, *Lyta vesicatoria* 76.
leg, *Insecta* 2520
mandibles, feeding behavior, larvae, *Cucujus clavipes*, *Dendroidea canadensis*, *Pytho depressus* 4357.
mouthparts, feeding, *Cetonia aurata* 6510.
mouthparts, *Osmia sculleni*, USA, Utah 9101.
penis, *Celithenus spoliata* 3262.
phylogeny, evolution, elytra, *Staphylinidae* 7288.
plants functional morphology collection structure, *Anthophoridae* 91.
proboscis, glossa length, *Bombus* 8895.
proboscis, resource partitioning, community structure, *Bombus*, Europe, North 6830.
sense organs, auditory perception, *Tettigoniidae* 3295.
sensilla, wings, flight, *Cetonia aurata*, *Geotrupes silvaticus* 7302.
sensory gland, comparison, *Polistes fuscatus*, *Polistes canadensis* 1801.
thermoregulation, heat transfer, *Colias* 6582.
tongue length, foraging behavior, diets, *Syrphidae* 5922.
ultrastructure, malpighian tubules, *Pyrops candelaria* 163.
water currents, streams, laser doppler anemometry, benthos, *Ecdyonurus venosus* 7026

Fungal flora.

- infestation, *Psylla pyri* 5730.
metabolites toxicity, temperature effects, larvae, *Fusarium*, *Tenebrio molitor* 996.

Fungi.

- association, *Cmisia carrolli* 4471.
association, development, species composition, *Phoridae*, British Isles 9107.
association, ecological distribution, *Insecta* 6038.

Fungi. (continued)

- association, geographical distribution, new records, *Acartophthalmus nigrinus*, *Agathomyia*, *Eire* 7889.
biological control, pest control, reviews, *Insecta* 8509.
contaminants, diets, rearing, *Heliothis* 735.
decomposition, leaf litter, deserts 2132.
diets, seasonal variations, *Scymnoides lividigaster*, *Leptothea galbula*, Australia 6049
diseases, pathogenesis, books, *Insecta* 7920
environmental impact, grazing, nutrient release, respiration, *Onychium subtenus* 2796.
food organisms, mercury, bioaccumulation, larvae, *Diptera* 2620.
fruit bodies, larvae association, *Diptera* 538.
gut microflora, *Myriapoda* 8306.
host plants, pest resistance, *Dendroctonus ponderosae*, *Pinus contorta latifolia* 6186.
infection, disease control, chalkbrood disease, *Apis mellifera* 2234.
infection, *Saissetia hemisphaerica*, Cuba 9010.
infection, transmission, *Scolytus ventralis*, *Abies grandis* 8473.
infestation, *Neolatosiphora belianthi*, seeds, *Helianthus annuus* 2074.
Nosema algaeae, effects on reproduction, development, *Anopheles stephensi* 739.
pathogenesis, virulence, *Insecta* 7368.
pathogenicity, larvae, *Culicidae* 7367.
pathogens, biological control, *Insecta* 1471.
pathogens, infection, *Lymantria dispar* 5741.
pathogens, taxonomy, Entomophthora taxonomic revision effects on 830.
pest control, biological control, *Insecta* 8532.
population dynamics, *Uropodidae* effects on, forests, leaf litter, Romania 6006.
soil microorganisms, abundance, soil fauna effects on, *Collembola* 5266.
substrate preferences, habitat selection, colonial characteristics, *Acromyrmex landolti fracticornis* 6221.
- Fungicides.**
antifeedants, *Spodoptera mauritia* 8975.
chemical control, mycosis, *Beauveria*, *Bombyx mori* 6154.
chemical control, pest control, *Aphis fabae* 4627.
effects on biological control pathogens, *Beauveria bassiana*, *Metarrhizium anisopliae*, *Curculio caryae* 1402.
effects on pathogens, biological control, *Nomuraea rileyi*, *Lepidoptera*, *Glycine* max 716.
pollution effects, mutagenicity testing, *Drosophila melanogaster* 4684.
- Fungus gardens.**
ethylene production, enzymes activity, measuring techniques, *Macrotermite* 6215.
foraging behavior, alarm behavior, colonial characteristics, *Macrotermes michaelseni* 2266.
mounds, colonial characteristics, *Odontotermes microdentatus* 5424.
- Furanocoumarins.**
host plants, chemical composition, growth, *Papilio polyxenes* 5968.
Umbelliferae, phototoxicity, herbivores, *Oecophoridae*, *Papilionidae*, USA, New York 2079.
- Furcula furcula caucasica**,
new subspecies, taxonomy, morphology, USSR, Caucasus 4043.
B-(2-Tsuryl)-acryloyl phosphate,
hydrolysis, adenosinetriphosphatase, cell surface membranes, embryos, *Manduca sexta* 4949
- Fusarium.**
infection, *Ophiomyia simplex* infestation effects on, *Asparagus officinalis*, USA, Massachusetts 6134.
metabolites toxicity, temperature effects, larvae, *Tenebrio molitor* 996.
pathogens, infection, *Lymantria dispar* 5741.
- Fusarium moniliforme**,
interspecific relationship, *Zea mays*, *Ostrinia nubilalis* 6899.
- Fusarium poae**,
metabolites toxicity, temperature effects, larvae, *Tenebrio molitor* 996.

GABA.

- neurotransmitters, inhibitors, neurons, *Periplaneta americana* 127.

Gabon.

- nests, distribution, density, rain forests, *Agelena consociata* 5213.
new species, taxonomy, morphology, *Afrotrombicula gabonica*, *Afrotrombicula vaubreci*, *Trombiculidae* 758.

Gabonia gabriela.

- new species, taxonomy, morphology, Kenya 3987.

Gabrus.

- new species, morphology, geographical distribution, New Guinea 2398.

Gahripleia kalolele.

- new species, taxonomy, morphology, Papua New Guinea 6339.

Galactose.

- effects on gene expression, RNA biosynthesis, *Chironomus tentans* 3873.
enzymatic activity, pure culture, developmental stages, *Drosophila melanogaster* 165

Galapagos Islands.

- taxonomy, morphology, *Staphylinidae* 1611.

Galedonta cornuta.

- new species, taxonomy, morphology, Brazil 5582.

Galedonta rotundicornis.

- new species, taxonomy, morphology, Brazil 5582.

Galedromus longipilis.

- predator-prey interactions, fecundity, development, oviposition, *Tetranychus urticae* 362.

Galeria melonella.

- ultrastructure, development, connective tissue, brain 125

Galeria cristata.

- hosts, parasites morphology, *Menacanthus alaudae* 9145.

Galeruca rufa.

- biological control, diseases elimination, pathogens, effects on *Nosema* 281.
biological control, weed control, defoliation, *Convolvulus arvensis* 2944.

Gaigula partita.

- feeding, larvae, host plants, *Oxalis* 7560.

Galleria.

- pathogens, functional morphology, dimorphism, *Xenorhabdus* 4189

Galleria mellonella.

- apiculture pests, biological control, pathogens, nuclear polyhedrosis virus 8456.
body weight, larvae, parasitism effects on, *Gonia cinerascens* 6766

Galleria mellonella, (continued)

- body weight, parasitism effects on, *Gonia cinerascens* 6765.
body weight, parasitism, *Gonia cinerascens* 2827.
chitin biosynthesis, epidermis 2516.
fat body, protein biosynthesis, tunicamycin effects on 6556.
fatty acids metabolism, enzymatic activity 202.
glutathione transferase, characterization 176.
hemolymph, immunity, effects on ultrastructure. *Pseudomonas aeruginosa* 8134.
host-parasite interactions, body weight, growth, *Gonia cinerascens* 2825.
host-parasite interactions, growth, juvenile hormones, *Gonia cinerascens* 2826.
host-parasite interactions, population growth, *Brachon hebetor* 1227.
hosts, mass rearing, parasites, *Pales pavidus* 510.
hosts, parasites development, temperature effects on 6772.
hosts, parasitoids, life cycle, *Dibrachys boarmiae* 9131.
hosts population density, parasites development, *Gonia cinerascens* 2829.
immune response, hemolymph, pathogenicity, *Bacillus cereus* 5720.
immunity, cobra venom factor effects on 1071.
immunity, gram-negative bacteria, antibacterial activity 1818.
Isaria felina isariensis effects on, insecticides activity 2223.
juvenile hormones effects on growth, survival 6764.
larvae, molting, role, hormones 2691.
larvae mortality, pathology, 269.
malpighian tubules development, imaginal discs transplantation 6632.
metamorphosis, chilling, crowding effects on 2724.
mortality, temperature effects, parasitism, *Heterorhabditis bacteriophora*.
Xenorhabdus luminescens 1814.
parasitism, pupae, hosts body weight, *Gonia cinerascens* 2822.
pathogenicity, gram-negative bacteria 5724.
pathogens effects on mortality, growth, *Spinothrips* 2648.
pathogens, mutants, enzymes, cell surface, virulence, *Pseudomonas aeruginosa* 4198.
pathogens, plaque assay, nuclear polyhedrosis virus 8144.
pathology, *Bacillus thuringiensis* 8-endotoxin effects on 1023.
pest control, biological control, *Bacillus thuringiensis* 6900.
pest control, pathogens, *Bacillus thuringiensis* 3834.
population density, hosts, effects on parasites population dynamics, population density 6773.
prothoracic gland, cells, ionic exchange, physicochemical properties 6591.
pupae, susceptibility, parasites, *Neoplectana carpocapsae* 3406.
RNA biosynthesis, juvenile hormones effects on, developmental stages 7862.
storage protein biosynthesis, fat body 6572.
storage proteins, identification, purification 6567.
susceptibility, pathogenicity, serotypes, *Bacillus thuringiensis* 5733.
virulence, proteinase, cell surface mutants, *Pseudomonas aeruginosa* 5738.
wing discs, protein biosynthesis 2575.
- Galleria moesta**,
nuclear polyhedrosis virus, isolation, characterization 7392.
- Galleries**,
construction, infestation, mathematical models, *Dendroctonus frontalis*, USA 3643.
- Gallerucida nigromaculata**,
defense mechanisms, defense secretions, blood 7528
- Gallie acid**,
antifeedants, food consumption, food conversion, *Spodoptera littoralis* 7345
- Galls**,
biological control, *Eupatorium adenophorum*, *Procecidochares utilis*, India 3615.
effects on meiosis, polyploids, *Persoonia falcata*, Insecta 8343.
emergence, host plants, *Urophora cardui*, *Cirsium arvense* 8354.
extraction methodology, *Eriophyidae* 2490.
formation, host plants, Insecta, Sweden 7558.
fruits, infestation, *Eriophyes prosopidis*, *Prosopis cineraria*, India 3591.
host plants, association, *Samudobia*, *Bentia* 7565.
host plants, new species, *Syzgyium cumini*, *Fergusonia syzygii*, India 4831.
host plants, new species, *Tetrastichus cecidobroter*, *Atreplex*, USA, California 7963.
host plants, niche pattern, *Aciurina*, *Chrysothamnus* 6792.
host plants, resistance, *Picea excelsa*, *Chermes abietis* 7562.
infestation, *Phytoptipalpus transitans*, *Zizyphus jujuba*, India 6798.
interspecific relationships, *Asphondylia helianthoglobulus*, *Rileyia americana*, *Torymus advenus*, *Torymus*, USA, Pennsylvania 5182.
morphology, host plants, *Paradiptosis tumefex*, *Abies balsamea* 6805.
pest resistance, breeding, *Oryza sativa*, *Orseolia oryzae* 5407.
pests, development, *Daniseura laticus*, USSR, Siberia 6940.
pests, host plants, Solanaceae, *Eriophyes cladophorus* 6910.
Quercus emoryi host plants, abundance, *Tororhops kosziarubi* 4422.
species composition, association, *Rudbeckia laciniata*, *Asphondylia helianthoglobulus* 6020.
Uromycladum teperranum, species composition, *Lepidoptera*, *Acacia*, host plants 7557.
weed control, biological control, *Cirsium arvense*, *Urophora cardui*, Canada 3805.
weight, autecology, methodology, parasitoids, *Dryocosmus kuriphilus* 7576.
- Galumna zachvatkini**,
new species, taxonomy, morphology, USSR 6348
- Gamasellus racovitzai**,
cold hardiness, acclimation, starvation, Antarctica, Signy I. 6579
- Gamasellus**,
species composition, parasites, Mammalia, Iran 7109
- Gambia**,
geographical distribution, *Derovatellus* 1615.
surveys, geographical distribution, *Arcandromorphoidea* 780.
surveys, taxonomy, morphology, *Tingidae* 4012.
yellow fever vectors, geographical distribution, *Aedes furcifer*, *Aedes taylori* 1658.
- Gambialoa edromai**,
new species, taxonomy, morphology, Uganda, Rwenzori Natl. Park 7203
- Gambialoa hibisci**,
new species, taxonomy, morphology, Uganda, Rwenzori Natl. Park 7203
- Gambialoa luflyi**,
new species, taxonomy, morphology, Uganda, Rwenzori Natl. Park 7203
- Gambusia affinis**,
predators, feeding behavior, biological control, *Culicidae* 617
- Gametes**,
heterochromatin, recombination, *Drosophila melanogaster* 3071.
Pinella aptera, ultrastructure 9037
- Gammalin**,
pest control, *Phosphorus virescens*, Nigeria 3002

Gampsocleis ryukyuensis,

new species, taxonomy, morphology, Ryukyu Is. 7238.

Ganglia,

abdomen, α -aminobutyric acid transport, autoradiography localization.

Peniplaneta americana 8066

electrophysiological recording, toxicity, insecticides, sesamex, dieldrin.

Blaberus system tissues 5778

nervous system issues, *N*-acetylcholine, *Peniplaneta americana* 128.

neurosecretion cells, larvae, *Sarcophaga lineatocollis* 2526.

octopamine biosynthesis, *Locusta migratoria* 2524

thorax, central nervous system, embryo cells, mutants, *Drosophila* 8648.

thorax, neurons, physiology, morphology, *Locusta migratoria* 8065.

Ganjam virus,

experimental infection, *Culex*, *Aedes*, *Haemaphysalis* 7385.

Gap junctions,

communication, wing disks, embryogenesis, *Drosophila* 5100

embryos, ultrastructure, *Manduca sexta* 3462

membrane permeability, epidermis, segments, *Oncopeltus fasciatus*, *Calliphora erythrocephala* 8901

Gapia,

taxonomic revision, morphology, keys 5558

Garainamiris,

new genera, taxonomy, morphology, Papua New Guinea 4851.

Garainamiris antennatus,

new species, taxonomy, morphology, Papua New Guinea 4851

Garphalia solani,

flight activity, seasonal variations 1976

life history, reproductive strategy, energetics, egg production 5911

maternal behavior, predators, defensive behavior 3563

Gas exchange,

respiration, *Araneae* 5672

spiracles, acropyles, respiration, *Tipula paludosa*, *Pedicia parvicellula* 4145.

trachea, respiration, *Hyalophora cecropia* 5671.

Gascardia destructor,

biological control, chemical control, insecticides, parasites 2938.

Gases,

atmospheric conditions, effects on activity patterns, *Ornithonyssus* 1937.

Gasteropneustidae,

surveys, records, geographical distribution, Austria 4733.

Gastancistrus mangiferae,

new species, morphology, geographical distribution, Asia 35.

Gastrimargus africanus orientalis,

cytology, heterochromatin, chromosomes, India 3898

Gastrointestinal tract,

anatomy, air sacs, *Veromessor liversi* 4149.

enzymatic activity, vitamin B biosynthesis, *Phoracantha semipunctata* 941.

osmoregulation, gastric caecum, *Aedes togoi* 5706.

pathology, parasites infection, *Trypanosoma brucei rhodesiense*, *Glossina morsitans* 1020

Gastronemius,

parasites, infectivity, development, *Aedes aegypti*, *Culex pipiens fatigans*.

Anopheles stephensi 5740

Simulium parasites, new records, infection, *Aedes aegypti*, *Culex pipiens fatigans*, *Anopheles stephensi* 4209

Gastrophysa atrocya,

diapause, spermatogenesis, temperature effects 1856.

weed control, biological control, *Rumex obtusifolius* 5985.

Gastrophysa atrocya,

herbivores, host selection, nutrients, feeding stimulation 486

Gastrophysa polygmi,

life history, sexual reproduction, fecundity, British Isles, England 4334.

predation, mortality, developmental stages, British Isles 8396

Gastrophysa viridula,

herbivores, grazing, effects on, *Rumex crispus* 4408

predation, effects on seeds, *Rumex crispus*, *Rumex obtusifolius* 6784.

Gasts,

host plants, collections, Insecta, Sweden 3599

Gegenes nostradamus,

new records, geographical distribution, Spain 7076

Gelechiidae,

stored products pests, abundance, Greece 7663

taxonomy, morphology, host plants, reviews 4896

Gene amplification,

chromosome genes, restriction endonuclease mapping, *Drosophila* 5454.

x chromosome inversion effects on, *Drosophila* 5469.

puffing, salivary gland chromosomes, *Rhynchosciara americana* 7837.

Gene conversion,

crossing-over, mutants, *Drosophila melanogaster* 9384

shrike locus, temperature-sensitive mutant, *Drosophila melanogaster* 9399.

Gene expression,

aluminum effects on, *Simulium vittatum* 7860

X chromosome, picornavirus mutagenesis, *Drosophila melanogaster* 5471.

clones, labelling cells, *Drosophila* 757

collagen gene, *Drosophila melanogaster* 8625

deficient mutant, pathogens resistance, *Drosophila melanogaster* 3879.

development, proteins, cuticle, *Drosophila melanogaster* 3911.

embryos, development, chorion, *Saturidae* 3884

esc gene, mutation, determination, segments, *Drosophila* 6253.

fluorouracil, 5-bromodeoxyuridine inhibition, mutants, *Drosophila* 1528.

heat shock, books, *Drosophila* 9504.

heat shock, induction, *Drosophila melanogaster* 3877

heat shock proteins, cell lines, salivary gland, *Drosophila* 8634.

heat shock proteins, ecdysterone stimulation, cDNA, hybridization analysis, cell lines, *Drosophila* 7815

hybridization, *Drosophila simulans*, *Drosophila mauritiana* 8655

lactate dehydrogenase activity, ontogeny, *Drosophila melanogaster* 8955

loci, sex determination, gynandromorphs, temperature-sensitive mutant, *Drosophila melanogaster* 7824

LSP-2 gene, ecdysterone, fat body, *Drosophila melanogaster* 5482.

mutants, development, *Drosophila* 8642

mutants, heat shock proteins, loci 87A7 locus, 87C1 locus, *Drosophila melanogaster* 8645

mutants, pleiotropies, *Drosophila melanogaster* 5472.

mutation, Ultrathorax mutations, thorax, abdomen, *Drosophila* 6272

protein biosynthesis, ecdysteroids effects on, cell lines, *Drosophila* 3336.

protein biosynthesis, salivary gland, larvae, *Chironomus thummi* 3880

- Gene expression, (continued)**
 RNA biosynthesis, salivary gland chromosomes, *Chironomus tentans* 3873.
 mRNA poly(A) containing, cDNA hybridization, silk gland, larvae, *Bombyx mori* 8112.
 [L]u[¹⁵⁶S] temperature-sensitive mutant, protein biosynthesis, chromosomes puffing, *Drosophila melanogaster* 8641.
 sex determination, biosynthesis, *Chrysomya rufifacies* 758.
 temperature, chromonous 9398.
 temperature effects on, life history, *Drosophila melanogaster* 7059.
 thorax development, bithorax genes, *Drosophila melanogaster* 4674.
 tubulin, embryogenesis, *Drosophila melanogaster* 3066.
 yolk proteins, 20-hydroxycyclohexanone effects on, fat body, *Drosophila melanogaster* 6243.
- Gene frequency,**
 adaptiveness, isoenzymes, *Drosophila* 5451.
 geographical variations, enzymes activity, *Drosophila melanogaster* 6283.
 sex ratio, population genetics, *Drosophila pseudoobscura*, USA, California 6279.
- Gene libraries,**
 histone H3 genes, insertions sites, cDNA nucleotide sequence, *Drosophila melanogaster* 8628.
- Gene localization,**
 esterase, *Aedes aegypti* 1490.
 protein composition, population genetics, *Drosophila melanogaster* 2350.
- Gene mapping,**
 banding, chromosome 3, *Drosophila melanogaster* 3070.
 X chromosome, mutation, *Drosophila melanogaster* 1505.
 Chromosomes, *Salinidae* 1491.
 defective mutant, longevity, *Drosophila melanogaster* 5450.
 deletion, mutants, *Drosophila melanogaster* 9400.
 dpp locus alleles complementation, polytene chromosomes, *Drosophila melanogaster* 8635.
 esterase, linkage, *Aedes aegypti* 1490.
 gene Su(cre)1, chromosomes, temperature-sensitive mutant, *Drosophila melanogaster* 7853.
 genes, DNA, *Drosophila melanogaster* 1500.
 genetic analysis, *Drosophila melanogaster* 1496.
 genetic factors effects on vitellogenin regulation, *Drosophila* 5095.
 histones genes, *Drosophila* 3068.
 immunofluorescence, polytene chromosomes, *Drosophila melanogaster* 8632.
 mutants, pleiotropics, paralog, *Drosophila melanogaster* 5472.
 mutants, sex linkage, *Culex pipiens* 7046.
 nucleosomes, genomes, *Drosophila melanogaster* 9395.
 nucleotide sequence, tRNA Val, genes, characterization, *Drosophila melanogaster* 4671.
 ribosomal proteins genes, organization, *Drosophila* 9392.
 RNA, *Drosophila melanogaster* 1494.
 rRNA genes, heterochromatin, chromosomes, *Drosophila melanogaster* 8636.
 structure genes, *Drosophila melanogaster* 7826.
- Gene regulation,**
 activity nucleolus organizer region, *Drosophila* 8633.
 cells differentiation, loci, *Drosophila* 5445.
 enzymatic activity, amylase, *Drosophila virilis* 5480.
 heat shock genes, *Drosophila* 6246.
 reviews, *Drosophila* 9380.
 transcription, tissues, differentiation, *Drosophila melanogaster* 1498.
 use cDNA probes, *Drosophila melanogaster* 3886.
- Genes,**
 characteristics, phylogeny, taxonomy, *Araea* 776.
 morphology comparison 1710.
 reclassification, Clytrinae, Nearctic Region, Neotropical Region 7945.
 synonymy, taxonomic revision, *Scototylus*, North America 2390.
 taxonomic revision, *Oreothaia*, Neartic Region 2426.
- Genes,**
 anastasis resistance, chromosome 3, strains, *Drosophila melanogaster* 9419.
 B104, characterization, DNA sequence, *Drosophila melanogaster* 6241.
 Baibiana rings, cDNA nucleotide sequence, *Chironomus thummi* 6247.
 cells differentiation, gene regulation, loci, *Drosophila* 5445.
 chorion, cDNA nucleotide sequence, proteins, *Bombyx mori* 8630.
 chorion, developmental stages, cDNA clones, *Bombyx mori* 6249.
 chorion, organization, gene amplification, restriction endonuclease mapping, *Drosophila* 5454.
 chorion proteins, evolution, *Bombyx mori*, *Antheraea pernyi* 4666.
 cin gene, heterozygotes, aldehyde oxidase activity, developmental stages, *Drosophila melanogaster* 7857.
 clones, chorion loci, *Bombyx mori* 6254.
 collagen gene, gene expression, DNA, nucleotide sequence, *Drosophila melanogaster* 8625.
 courtship, mating behavior, hybrids, *Drosophila melanogaster*, *Drosophila simulans* 3109.
 DNA, gene mapping, *Drosophila melanogaster* 1500.
 DNA, transcription, RNA polymerase, *Drosophila* 1507.
 dosage, aneuploidy, X chromosome, *Drosophila melanogaster* 2301.
 duplication, alcohol dehydrogenase, *Drosophila buzzatii* 5491.
 esc gene, gene expression, determination, segments, *Drosophila* 6253.
 fitness, males, breeding success, *Drosophila melanogaster*, *Drosophila pseudoobscura* 3125.
 gene Su(cre)1, gene mapping, chromosomes, temperature-sensitive mutant, *Drosophila melanogaster* 7853.
 genetic analysis, DNA, hybridization, *Drosophila melanogaster* 3917.
 glucose-6-phosphate dehydrogenase, localization, X chromosome, *Tribolium castaneum* 9387.
 heat shock, activation, transcription, *Drosophila* 1506.
 heat shock, DNA nucleotide sequence, temperature effects on transcription, *Drosophila melanogaster*, *Drosophila simulans* 7834.
 heat shock, gene regulation, *Drosophila* 6246.
 heat shock, induction, mRNA, cloning, characterization, *Drosophila melanogaster* 3877.
 heat shock proteins, DNA nucleotide sequence, *Drosophila melanogaster* 8631.
 heat shock proteins, hybridization, localization, *Drosophila melanogaster* 4672.
 heat shock transcription, role RNA polymerase II, *Drosophila melanogaster* 6274.
 histone H3, insertion sequences insertions sites cDNA nucleotide sequence, gene libraries, *Drosophila melanogaster* 8628.
 histones, gene mapping, *Drosophila* 3068.
 homology, transposition, DNA nucleotide sequence, *Drosophila melanogaster* 1504.
 inheritance, genetics, breeding success, host plants, *Pisum sativum*, *Stilophilus oryzae* 1489.
- Genes, (continued)**
 isoenzymes, genetics, *Triatoma infestans*, Bolivia 4668.
 isoenzymes, population studies, comparison, *Triatoma infestans*, Bolivia 4692.
 lethality, abortion, eggs, sex determination, males, *Megoura viciae* 6252.
 lethality, effects on mating behavior, *Drosophila melanogaster* 5484.
 lethality, mutation, X radiation sensitivity, *Drosophila melanogaster* 7044.
 linkage disequilibrium, selection, *Drosophila subobscura* 1497.
 linkage, DNA structure, evolution, *Antheraea polyphemus* 1492.
 LSP-2 gene, ecdysterone, fat body, *Drosophila melanogaster* 5482.
 mal gene, genetic control, aldehyde oxidase, xanthine dehydrogenase activity, *Drosophila melanogaster* 7858.
 modification, mapping, chromosomes, *Drosophila subobscura* 3060.
 mutants, recombination, *Drosophila melanogaster* 7879.
 mutation, eye color, *Apis mellifera* 1524.
 mutation, X chromosome, heterozygosity, enzymatic activity, *Drosophila virilis* 1531.
 natural selection, mating behavior, *Pteropyx*, *Afrocmex*, *Xylocoris* 1152.
 notch gene, phenotypes, lethality, *Drosophila melanogaster* 3101.
 nucleotide sequence, evolution, *Drosophila melanogaster* 7879.
 nucleotide sequence, heat shock proteins, *Drosophila melanogaster* 8629.
 nucleotide sequence, plasma proteins, *Drosophila* 3876.
 pathogens, susceptibility, *Plasmodium berghei* *berghie*, *Anopheles atroparvus* 9015.
 peptide mapping, alcohol dehydrogenase, genetic variance, population genetics, *Drosophila melanogaster* 7874.
 pest resistance, *Venturia inequalis*, *Panonychus ulmi* susceptibility, *Malus* 6204.
 pesticide resistance, larvae, *Lucilia cupripa* 3132.
 pesticide resistance, N-nitrosodimethylamine toxicity, *Drosophila melanogaster* 7048.
 6Pgd gene, GpPd gene, genotypes correlation biochemical characteristics, *Drosophila melanogaster* 4687.
 phosphoglucotransferase, polymorphism, *Mansonia crassipes*, *Mansonia uniformis* 7872.
 polymorphism, structure variation, ribosomes, rRNA, *Drosophila melanogaster* 5448.
 promoters, location, fibron, *Bombyx mori* 4663.
 ribosomal proteins, chromatin, deoxyribonuclease I, site location, *Drosophila melanogaster* 1503.
 ribosomal proteins, organization, *Drosophila* 9392.
 rRNA, sex chromosomes, exchange, males, *Drosophila melanogaster* 3895.
 hRNA, 5,6-dichloro-1,β-D-ribofuranosylbenzimidazole inhibition transcription initiation, *Chironomus tentans* 8652.
 rRNA, analysis, Y chromosome nucleolus organizer region mutants, *Drosophila melanogaster* 5456.
 rRNA, cDNA transcription, cell-free system, *Drosophila melanogaster* 8624.
 rRNA, DNA restriction endonuclease mapping, hybridization analysis, *Atacatus ncini* 9393.
 rRNA, nucleolus organizer region, introns characterization, restriction endonuclease mapping, *Drosophila hydei* 4664.
 rRNA, repeated sequence, genes, *Drosophila melanogaster* 8657.
 tRNA Arg, transcription initiation sites characterization, *Drosophila* 9390.
 tRNA Lys, DNA nucleotide sequence, *Drosophila melanogaster* 9396.
 tRNA, nucleotide sequence, secondary structure modification, *Drosophila melanogaster* 4671.
 tRNA, rRNA 5S, chromosomes organization, hybridization analysis, *Drosophila melanogaster* 6244.
 tRNA, tyrosine, localization, DNA, *Drosophila melanogaster* 2303.
 tRNA Val, analysis, *Drosophila melanogaster* 3878.
 tRNA Val, cDNA, cell-free system transcription, *Drosophila melanogaster* 9389.
 tRNA Val, characterization, gene mapping, nucleotide sequence, *Drosophila melanogaster* 4671.
 tRNA 5S, organization, insertion sequences, *Drosophila melanogaster* 9397.
 Sgs4 gene, association, deoxyribonuclease I hypersensitivity sites, DNA, 5-terminus, *Drosophila* 6250.
 sgs-6, localization, chromosomes, salivary gland, *Drosophila melanogaster* 2307.
 sgs-4, X chromosome, larvae, salivary gland, secretion, *Drosophila melanogaster* 2311.
 structure, gene mapping, *Drosophila melanogaster* 7826.
 structure, polytene chromosomes, *Drosophila melanogaster* 3065.
 transcription, *Drosophila* 3061.
 transposing elements, genomes, chromosomes, *Drosophila* 6237.
 α-tubulin transcription, oogenesis, embryogenesis, *Drosophila melanogaster* 6242.
 Ubx gene, mutation, gene expression, thorax, abdomen, *Drosophila* 6272.
 vitellogenin, juvenile hormones stimulation transcription, fat body, *Locusta migratoria* 6569.
 yolk proteins, mRNA, nucleotide sequence, ecdysone effects on transcription, *Drosophila melanogaster* 4662.
 YPI gene, YPII gene, cDNA nucleotide sequence, comparison mRNA, *Drosophila melanogaster* 5455.
- Genetic analysis,**
 brachypterism, *Oncopeltus fasciatus* 6291.
 Y chromosome, transmission, entire compound second chromosome, *Drosophila melanogaster* 9401.
 chromosomes, taxonomy, *Anopheles marshalli* 5566.
 clones, DNA, *Drosophila melanogaster* 1495.
 DNA, hybridization, *Drosophila melanogaster* 3917.
 enzymatic activity, polymorphism, population genetics, *Drosophila melanogaster* 1551.
 enzymes, comparative studies, *Trichogramma* 197.
 eye fluorescence mutants, *Ceratitis capitata* 1532.
 gene mapping, *Drosophila melanogaster* 1496.
 host plants, pest resistance, *Nilaparvata lugens*, *Oryza sativa*, Japan 8428.
 mutants, *Anopheles stephensi* 7850.
 mutants, linkage, morphology, *Aedes togoi* 7851.
 mutation, duplication, *Drosophila* 9414.
 pest resistance, varieties, *Oryza sativa*, *Sogatella furcifera* 9280.
 pesticide resistance, binopacryl, tetradifon, *Panonychus ulmi* 7870.
 pesticide resistance, pesticides (organophosphorus), *Panonychus ulmi* 7869.
 sex linkage mutants, *Aedes togoi* 7852.
 sigma virus infection, *Drosophila melanogaster* 8999.
- Genetic control,**
 alcohol metabolism, alcohol dehydrogenase, *Drosophila* 3909.
 aldehyde-oxidase, xanthine dehydrogenase activity, mal gene, *Drosophila melanogaster* 7858.
 catalase ontogeny, *Zaprionus parvitergus* 8653.
 Y chromosome translocations, embryos lethality, *Hylemya antiqua* 2316.
 denonucleosis virus infection susceptibility, *Bombyx mori* 2351.

Genetic control, (continued)

- development, *Drosophila melanogaster* 5836
- development, wings, biometrics, *Drosophila* 3503
- diapause induction, diapause termination, photoperiod, temperature, *Diatraea grandiosella* 5076
- ecdysterone, chromosomes puffing, salivary gland, *Drosophila melanogaster* 7821
- enzymatic activity, alcohol dehydrogenase, *Drosophila melanogaster* 2343
- enzymatic activity, pigments, biosynthesis, *Drosophila melanogaster* 3907
- failure, Y chromosome translocations, *Lucilia cuprina* 2348
- feeding behavior, interspecific hybridization, *Drosophila arizonensis*, *Drosophila mojavensis* 3108
- morphogenesis, mutants, *Drosophila melanogaster* 9416
- pest control, cytoplasmic male sterility, translocation, *Culex quinquefasciatus* 6287
- pesticide resistance, enzymatic activity, *Culex pipiens* 3919

Genetic control resistance

- sterility factors, *Drosophila melanogaster* 3121

Genetic distance

- enzyme polymorphism, heterozygosity, genotypes, *Anthonomus grandis* thurberiae, *Anthonomus grandis* grandis, USA, Arizona 2339

Genetic effects

- overwintering, cold tolerance, survival, fecundity, *Drosophila melanogaster* 3926

Genetic factors

- breeding, American foulbrood disease resistance, apiculture, *Apis mellifera* 3823
- breeding pest resistance, *Frangaria ananassa*, *Tetranychus urticae* 554
- covers, pests susceptibility, *Poa pratensis*, *Sphenophorus parvulus* 537
- disease resistance, brood disease, larvae removal, workers, *Apis mellifera* 5589
- eggs size, tetraploidy, *Bombix mori* 3088
- enzymatic activity, environmental effects, isochromosomes, *Drosophila melanogaster* 2337
- enzymatic activity, larvae development, *Drosophila melanogaster* 1541
- enzymatic activity variability, *Drosophila melanogaster* 3067
- enzyme polymorphism, esterase, *Drosophila mercatorum* pararepleta 5481
- evolution, males, workers, social organization, *Hymenoptera* 3848
- eye color mutants, *Plodia interpunctella*, *Ephestia elutella* 3905
- gynandromorphism, sex chromosomes, *Dermatocent andersoni* 1547
- infectivity, parasites, *Trypanosoma brucei*, *Glossina morsitans* 4185
- inheritance, antennal sensilla, *Apis mellifera* 7060
- inheritance, coloration, *Mutinus persicae* 5478
- life history, temperature effects on gene expression, *Drosophila melanogaster* 7059
- longevity, adults, *Drosophila* 5057
- meiotic drive, polymorphism, models, *Aedes aegypti* 772
- mutants, sexual behavior, courtship, *Drosophila* 4286
- pest resistance inheritance, *Penicetum americanum*, *Blissus leucopterus* 8460
- pesticide resistance, aryl carbamate insecticides, *Metasulcus occidentalis* 8651
- pesticide resistance, *Lucilia cuprina* 3132
- pesticide resistance, malathion, *Anopheles culicifacies* 1047
- pesticide resistance, stored products pests, strains, *Bruchidae* 1068
- physiology, symbiosis, *Staphylinus* 5174
- polymorphism, coloration, *Araneus diadematus*, *Araneus marmoreus* 7064
- radiation resistance, caffeine effects on, *Drosophila melanogaster* 7042
- radioresistance, chromosome 3, populations, *Drosophila melanogaster* 2345
- radioresistance, effects on oocytes, radiation, *Drosophila melanogaster* 2346
- radioresistance, germ cells, *Drosophila melanogaster* 2314
- recombination, sex determination methodology, automation, *Ceratitis capitata* 1409
- selection, host plants damage, pest resistance, *Ostrinia nubilalis*, *Zea mays* 3780
- sex ratios, selection, *Tribolium castaneum* 1561
- susceptibility, parasites, *Brugia pahangi*, *Wuchereria bancrofti*, *Aedes* 8146
- translocations, homozygotes, fitness, *Hyalema antigua* 2330
- virulence regulation, *Drosophila* 5095

Genetic load

- inbreeding, effects on eggs hatchability, *Lepidoptera* 7877

- population genetics, *Drosophila willistoni*, Colombia 9429

- population genetics, *Melipona scutellari* 5495

- sex alleles, *Melipona rufiventris*, *Melipona nigra*, *Melipona quadrifasciata*, *Scaptomyza xanthobothra*, *Lestremilitta limao* 5495

Genetic relationship

- enzymes electrophoresis, taxonomy, *Euchloe simpsonia*, *Euchloe cramen* 8662

- population structure, *Notomymecurus macrops*, Australia 3123

- social behavior, colonial characteristics, measuring techniques, *Insecta* 7871

Genetic variance

- Adh locus, restriction endonuclease mapping, population genetics, *Drosophila melanogaster* 9425

- alcohol dehydrogenase, biochemical characteristics, natural selection, *Drosophila melanogaster* 3910

- alcohol dehydrogenase, genotype-environment interactions, *Drosophila melanogaster* 2298

- allozymes, heterozygosity, *Drosophila* 3920

- allozymes, population studies, *Pardosa* 3927

- allozymes, *Xestia* 8664

- body weight, melanization, genotype-environment interactions, *Alsophila pomatana* 8664

- carriers preferences, phoretic behavior, *Psephenocichus necrophorus* 8663

- chromosomes, *Anopheles* 4693

- chromosomes segregation, *Drosophila melanogaster* 9403

- correlation linkage, equilibrium, allozymes, *Drosophila subobscura* 7866

- enzyme polymorphism, alcohol dehydrogenase, environmental effects, *Drosophila melanogaster* 5492

- enzymes, population genetics, strains, *Glossina morsitans morsitans* 7876

- esterase enzymatic activity, environmental factors, *Drosophila simulans* 3114

- evolution, pesticide resistance, dimethoate, *Musca domestica* 9422

- geographical variations, polymorphism, allozymes, *Drosophila subobscura* 3928

- haploidy, diploidy, *Drosophila* 3118

- loci, enzymes, alcohol dehydrogenase, population genetics, *Coelopa frigida* 6278

- malathion, pirimiphos-methyl pesticide resistance, strains, *Tribolium castaneum* 7194

- population genetics, cocoons, *Bombix mori* 3028

- population genetics, host plants, *Peridroma bipunctata*, *Eucalyptus marginata*, *Eucalyptus rudis* 7875

- population genetics, *Musca autumnalis* 9423

- population genetics, peptide mapping, alcohol dehydrogenase, *Drosophila melanogaster* 7874

- population genetics, *Musca autumnalis* 9423

- population genetics, peptide mapping, alcohol dehydrogenase, *Drosophila melanogaster* 7874

- population genetics, *Musca autumnalis* 9423

- population genetics, peptide mapping, alcohol dehydrogenase, *Drosophila melanogaster* 7874

- population genetics, *Musca autumnalis* 9423

- population genetics, peptide mapping, alcohol dehydrogenase, *Drosophila melanogaster* 7874

- population genetics, *Musca autumnalis* 9423

- population genetics, peptide mapping, alcohol dehydrogenase, *Drosophila melanogaster* 7874

- population genetics, *Musca autumnalis* 9423

- population genetics, peptide mapping, alcohol dehydrogenase, *Drosophila melanogaster* 7874

- population genetics, *Musca autumnalis* 9423

- population genetics, peptide mapping, alcohol dehydrogenase, *Drosophila melanogaster* 7874

- population genetics, *Musca autumnalis* 9423

- population genetics, peptide mapping, alcohol dehydrogenase, *Drosophila melanogaster* 7874

- population genetics, *Musca autumnalis* 9423

- population genetics, peptide mapping, alcohol dehydrogenase, *Drosophila melanogaster* 7874

- population genetics, *Musca autumnalis* 9423

- population genetics, peptide mapping, alcohol dehydrogenase, *Drosophila melanogaster* 7874

- population genetics, *Musca autumnalis* 9423

- population genetics, peptide mapping, alcohol dehydrogenase, *Drosophila melanogaster* 7874

- population genetics, *Musca autumnalis* 9423

- population genetics, peptide mapping, alcohol dehydrogenase, *Drosophila melanogaster* 7874

- population genetics, *Musca autumnalis* 9423

- population genetics, peptide mapping, alcohol dehydrogenase, *Drosophila melanogaster* 7874

- population genetics, *Musca autumnalis* 9423

Genetic variance, (continued)

- repeated sequence DNA, species, *Drosophila* 8639
- resting behavior, host preferences, blood meals, *Anopheles culicifacies*, Sri Lanka 9430
- selection, linkage, heritability, *Drosophila melanogaster* 5441
- sex chromosomes, cross-breeding, strains, *Drosophila melanogaster* 7029
- sex ratio, *Drosophila pseudoobscura* 6290
- variability, sex linkage, recombination, X chromosome, *Drosophila melanogaster* 5461
- yeast attractancy, niche pattern, feeding behavior, *Drosophila buzzatii*, *Drosophila aldrichi* 3268

Genetics

- albicans, heritability, *Melanophus sanguineus* 6269
- biochemical analysis, cyclic nucleotides, *Drosophila melanogaster* 3912
- biochemical characteristics, pesticide resistance, insecticides, aryl carbamates, *Metasulcus occidentalis* 4688
- biotypes, *Nephotettix cincticeps*, Japan 2297
- breeding: selection methodology, mathematical models, *Apis mellifera* 8620
- chromosomes, bristles selection, *Drosophila melanogaster* 1513
- courtship, mating behavior, eye color mutants, *Drosophila melanogaster* 6276
- courtship: song, *Drosophila melanogaster*, *Drosophila simulans*, *Drosophila mauritiana* 1536
- cuticle polarity, mutants, *Drosophila melanogaster* 6271
- developmental genetics, morphology, taxonomy, *Aphididae* 2335
- developmental genetics, wings, mutation, mutants, *Drosophila* 1523
- disease resistance, granulosis virus, *Phthorimaea operculella* 6239
- effects on nondysjunction, chromosomes, *Drosophila melanogaster* 4680
- food preferences, biotypes, *Nilaparvata lugens* 2340
- gene expression, bithorax genes, thorax development, *Drosophila melanogaster* 4674
- genes, isoenzymes, *Tratoma infestans*, Bolivia 4668
- host plants, pest resistance, *Abelmuscos esculentus*, *Amarca biguttula biguttula* 6934
- hybrids, conditioning, phenotypes, central excitatory state, *Phormia regina* 6277
- inbreeding, chromosomes, nondysjunction, *Drosophila melanogaster* 6257
- inbreeding, recombination, *Drosophila melanogaster* 7032
- infection, biological control, pest control, *Plasmodium yoelii nigeriensis*, *Anopheles gambiae* 5338
- inheritance, genes, breeding success, host plants, *Psidium sativum*, *Staphylinus* 1489
- intenses, sex determination, *Lymantria dispar*, Japan 3918
- life history, *Drosophila melanogaster* 3117
- males, mating behavior, competition, chemosterilization, *Anopheles culicifacies* 1982
- mating behavior, mate selection, strains, *Tribolium castaneum* 6275
- mutants, paralog, pleiotropics, *Drosophila melanogaster* 5472
- mutation, leg, morphology, *Drosophila* 766
- nondysjunction, *Drosophila melanogaster* 3105
- nondysjunction, *Drosophila melanogaster* 3106
- pests, hybridization, biotypes, *Nilaparvata lugens* 5489
- regeneration patterns, imaginal disc, *Drosophila* 4252
- reproductive isolation, strains, competition, population density, *Drosophila melanogaster* 1545
- sexual behavior, mating behavior, *Apis mellifera*, *Melipona quadrifasciata* 1543
- survival: radiation, *Anthonomus grandis* 2296
- susceptibility, pathogens, *Aedes aegypti*, *Dirofilaria*, *Brugia* 2623
- taxonomy, phylogeny, *Elaphus americanus* 3189
- temperature-sensitive mutant, development analysis, *Drosophila melanogaster* 3102
- translocations, fertility, mating types, heterozygotes, pest control, *Musca domestica* 2328
- variation, enzymatic activity, isochromosomes, natural selection, *Drosophila melanogaster* 2337
- wings, variations, clines, *Heteronympha merope merope*, Australia 3925

Genistellodes hibernicus

- parasites, larvae, *Allocaecia vivipara* 2624

Genital tract

- anatomy, function, constrictors, *Calpodus ethlius* 9038

- fatty acids, chemical composition, lipids, *Acheta domestica*, *Gryllus* 198

- phoresy, *Huntia plethorichodes*, *Acrostichus*, *Anthophora bomboidea*, *Halicus ligatus*, *Halicus fannosus* 1213

Genitalia

- anatomy, identification, *Xestia docta*, *Xestia adela*, Canada, Ontario 2667

- females, dissection methodology, *Isoxoida* 62

- histology, mutants, intersexes, *Drosophila melanogaster* 5064

- hypopygium, *Curculionidae* anatomy, males, *Condylostylus ornaticauda* 9035

- males, morphology, *Blattella* 804

- morphology, anatomy, males, females, *Paradina* 2666

- morphology, *Andropogon* larvae, *Oncophanes*, *Phyllipsina*, *Eure* 2428

- morphology, *Aphanus*, *Oxycaenura* 9039

- morphology, *Carcinopyga lichenigera*, *Carcinopyga proserpina* 4045

- morphology, comparison, species identification, *Apotomis semifasciana*, *Apotomis infida* 82

- morphology, *Derovatellus* 4781

- morphology, differentiation, *Aprostola triplesia*, *Aprostola asclepiadis*, *Aprostola trigemma*, *Czechoslovakia* 1723

- morphology, differentiation, *Celyphodes cespitanus*, *Celyphodes flavipalpus*, *Czechoslovakia* 1724

- morphology, *Eumenes pedunculatus*, *Eumenes coarctatus*, *Eumenes coronatus*, *Eumenes papillatus*, Finland, USSR 7893

- morphology, geographical variations, reproductive isolation, Males, *Drosophila* 1552

- morphology, *Hesperandra* 6505

- morphology, juvenile hormones analogs, *Panstrongylus megistus* 5089

- morphology, males, females, *Encicospilus americanus*, *Encicospilus flavoscutellatus* 8888

- morphology, males, females, *Hypsipyla robusta* 90

- morphology, males, *Harpagophallus* 5061

- morphology, males, *Holcostethus hirus* 4941

- morphology, males, *Holcostethus hirus* 5809

- morphology, males, *Nemobrenthia aeneipennis*, *Nemobrenthia melzeri* 8755

- morphology, males, *Plumia mandarina*, Sweden, Uppland 4714

- morphology, males, *Protodineychus punctatus* 6480

- morphology, males, *Saldula latitellus* 6414

- morphology, males, syntypes, *Derovatellus moqueris* 8043

- morphology, mating effects on, *Coelionymia hominivora* 8212

- morphology, *Metacalia prunosa*, Palearctic Region 4715

Genitalia, (continued)

morphology, new species, *Psallus physocarpus*, USA, New York 2435.
 morphology, sex differentiation, *Hyperodes bonariensis* 87.
 morphology, *Stenochilus*, Colopha, Australasian Region 8052.
 morphology, taxonomy, new species, *Cynopogon sabroskyi*, USA, Wyoming 2421.
 morphology, taxonomy, *Platypenes* 6500.
 morphology, *Tetrablenmidae* 4767.
 muscles, anatomy, males, *Tortricinae* 8903.

Genomes,

DNA, avian sarcoma virus, integration, eggs, embryos, *Drosophila melanogaster*

elimination, chromosomes, transmission (sexual) diversity, *Drosophila melanogaster* 3064.

eukaryotes, reviews, *Drosophila* 9380.
 nucleosomes, gene mapping, *Drosophila melanogaster* 9395.
 organization, globin loci, *Drosophila* 7823.
 reviews, *Drosophila melanogaster* 6248.
 transposing elements, genes, chromosomes, *Drosophila* 6237.

Genotype-environment interactions,

alcohol dehydrogenase, genetic variance, *Drosophila melanogaster* 2298.
 body weight, melanization, population genetics, *Achilopa pomotana* 8664.
 population genetics, *Nymphalis antopa*, North America 5497.

Genotypes,

adaptiveness, selection, *Drosophila melanogaster* 1508.
 AdH genotype, heat shock stress, effects on ethanol tolerance, *Drosophila melanogaster* 7859.

alcohol dehydrogenase, enzymatic activity, allozymes, *Drosophila melanogaster* 5443.

alcohol dehydrogenase, multiple mating, sperm displacement, mathematical models,

Drosophila melanogaster 9431.
 correlation biochemical characteristics, *Gp* gene, *Gp* gene, *Drosophila melanogaster* 4687.

effects on egg production, *Drosophila melanogaster* 7472.
 food plants, food preferences, *Sitophilus oryzae*, *Zea mays* 8544.

food preferences, nutrient utilization, *Zea mays*, *Sitophilus oryzae* 4358.
 heterozygosity, enzyme polymorphism, distribution, *Anthonomus grandis* thurberae.

Anthonomus grandis grandis, USA, Arizona 2339.

host plants, infestation, *Sorghum bicolor*, *Sporoptera frugiperda* 6127.

host plants, olfactory preferences, *Gossypium*, *Earias vitigera* 9080.

host plants, oviposition, *Lygus hesperus* 1903.

host plants, pest resistance, larvae survival, *Sitona* 6902.

host plants, pest resistance, *Sorghum*, *Schizaphis graminum* 6153.

host plants, pest resistance, *Zea mays*, *Sporoptera eridania* 8518.

malate dehydrogenase activity, comparison, Africanized honey bee, *Apis mellifera* adansonii 7062.

mutants, *Bombus morio* 9417.

pest resistance, *Eulesthes coracana*, *Sesamia inferens*, *Myliocerus maculosus* 5408.

population structure, population genetics, *Formica transcaucasica*, *Formica*

polyctena, *Formica aquilonia* 5494.

selection, pesticide resistance, dieldrin, diazinon, *Lucilia cuprina* 7873.

Geocoris, abundance, crop fields, weed control effect on, *Glycine* max 2997.

nontarget organisms, insecticides toxicity 8172.

nontarget organisms, toxicity, chlordaneform 4227.

Geocoris bullatus,

predators, effects on growth rate, *Myzus persicae* 2071.

predators, host plants effects on, *Myzus persicae* 723.

Geocoris pallens,

toxicity, methyl parathion, toxaphene 1830.

Geocoris punctipes,

abundance, nectar effects on, *Gossypium* 5971.

flight activity, seasonal variations 1577.

predator-prey interactions, *Pseudophasia includens* 587.

rearing, diets 1691.

thermoregulation, water relations, arid zones 5707.

toxicity, methyl parathion, toxaphene 1830.

Geocoris uiginosus,

predator-prey interactions, *Pseudophasia includens* 587.

Geocoroides,

taxonomy, morphology, India 7193.

Geodromicus iranicus,

new species, Iran 1187.

Geographic distribution,

taxonomy, *Passes*, Japan 2445.

Geographical distribution,

abundance, *Danaua plexippus*, USA, Wisconsin 7566.

abundance, phenology, *Scutellidae*, USA, Texas, Rio Grande Valley 1975.

abundance, *Procordulia grayi*, New Zealand 9501.

abundance, rare species, *Apterilipus parvulus*, USA, California, Laguna L.

2288.

Acleris obtusana, Finland 7222.

Aegialia terminalis, *Aegialia lacustris*, *Aegialia cylindrica*, *Eremazus*

unistratus, Nepal 21.

Aleurodiphys americanus, *Aleurodiphys basicinctus*, *Aleurodiphys*

pergandilui 2456.

Amphipyleia quadratidigitata, host preferences 783.

Aachylorhynchus bicarinatus, new species, new records, Panama 1614.

Apion angusticollis, Bulgaria 4710.

biogeography, new species, *Labidostomidae* vialae, *Labidostomidae* consicum,

Corsica 4454.

biology, *Bruchida*, Turkey 1945.

biology, *Pompilus* 834.

bionomics, colonies, *Serriermes serifer* 6989.

biotypes, mathematical models, development, emergence, *Heliothis zea*, USA 2695.

birds parasites, *Ereynetidae*, USA, Hawaii 795.

Boreus nivoriundus, *Boreus brumalis*, Canada, Ontario 7114.

breeding, morphology, *Andricus quercuscolis*, British Isles 7616.

Carolella beevorana, USA, California 6722.

cavernicolous species, *Plusiocampa bonadoni* pavani, *Plusiocampa bonadoni*

lanzai, *Plusiocampa bonadoni* bonadoni, Switzerland, Valais 4822.

Celerio ephorbiae, Spain 7096.

Cerambycidae, Nepal 1609.

Cerocephala rufa, *Cerocephala eocoptogastri* 2459.

check lists, *Bledionotus* 825.

check lists, *Formicidae*, Korea 3146.

check lists, *Lepidoptera*, Italy, Tuscany 3141.

Geographical distribution, (continued)

check lists, *Odontata*, Mozambique 7107.

check lists, reviews, *Ecitoninae*, Mexico 9500.

check lists, *Sarcophagidae*, Korea 3147.

Coleoptera, West Indies 806.

collections, Hungarian Natural History Museum, Oligia, Palearctic Region 8674.

colonization, population genetics, *Drosophila subobscura*, Chile 1578.

control programs, *onchocerciasis*, *Simulium*, Senegal 9249.

Corotoca melantho, *Corotoca phylo*, Brazil 6377.

Cryptoryctes brittoni, *Cryptoryctes nigripennis*, *Cryptoryctes pimbis*,

cryptoryctes psilus, *Cryptoryctes tectus*, *Cryptoryctes trifidus*, Australia, South

Australia 2675.

Culicidae, India, Assam 782.

cytology, chromosomes, population genetics, *Simulium tuberosum* 4694.

Derovatellus, *Gambia* 1615.

Diamanus osculans, Australia, New South Wales 9502.

Dillieritimus, *Epitomis*, *Dillieritimus filiformis mundus*, North America 4027.

Dipniss-thoracica, Senegal 7753.

dispersal, introduced species, *Chrysomya chloropyga*, *Chrysomya megacephala*,

Chrysomya albiceps, Brazil 9172.

Dolophilodes major, USA, Southeast 1716.

ecological distribution, *Aphididae*, India 5258.

ecological distribution, colonies, *Solenopsis*, USA, Texas 6995.

ecological distribution, morphology, new species, *Dacus opilliae*, Australia 821.

ecology, *Euchoripatus*, France 9108.

ecology, new species, *Cricotopus zavreli* 2424.

ectoparasites, birds, *Anthropoda*, USA, Alaska 520.

Ectrepesthoneura, Palearctic 811.

effects on development time, *Apis mellifera* 375.

effects on polymorphism, seasonal variations, *Zonocerus variegatus* 465.

effects on speciation, *Drosophila heteroneura*, *Drosophila silvestris* 1562.

effects on susceptibility, Japanese encephalitis virus, *Culex tritaenior* 273.

Empididae, *Dolichopodidae*, Germany, Fed. Rep. 3865.

entomofauna, check lists, British Isles 3137.

environmental effects, habitat, community composition, *Odontata*, Lesser Antilles

1569.

environmental factors, *Halipilidae*, Denmark 5516.

environmental surveys, *Lonchopora lutea*, *Lonchopora furcata*, British Isles,

England 3559.

Erora laeta, *Erora quaderna sanfordi*, North America 6329.

Euchloe belemia hesperidum, Canary Is., Grand Canary 7067.

Eumenes pedunculatus, *Eumenes coraciatus*, *Eumenes coronatus*, *Eumenes papillarius*,

Finland, USSR 7893.

evolution, cladistic analysis, host plants, *Piesmatidae*, Gondwanaland 2352.

evolution, *Drosophila*, USA, Hawaii 5502.

factors affecting dispersal, *Theophrastus trifolius maculata* 1964.

food plants, British Isles, *Melanargia galathea* 9091.

forests, *Coleoptera*, Sweden, Abisko 4424.

Forficula aunicularia, Erie 7890.

fresh water, physicochemical properties, dunes, coastal zone, population

structure, *Odontata*, Australia, Queensland 4457.

freshwater environments, habitat, body size, case construction, *Limnephilidae*

7807.

geographical variations, morphology, coloration, *Charadra ingenua* 2510.

habitat, biogeography, *Euxoa*, North America 3933.

habitat, *Coleoptera*, France 9470.

habitat, feeding behavior, *Opisthacanthus cayarorum*, Brazil 5220.

habitat, *Necrophilus petiti*, North America 2771.

habitat, new records, *Leptyphantes*, Europe, Alps 7899.

habitat, *paraleucopsis mexicana*, Mexico, Sonora, Kino Bay 2884.

habitat, pollinators, *Syrphidae*, Denmark 5514.

habitat preferences, speciation, *Synspondonites* 1563.

habitat, *Staphylinidae* 3181.

habitat, *Tetragonia viridissima*, *Tetragonia canis*, German Dem. Rep. 7904.

habitat, vectors, disease transmission, *Rhipicephalus appendiculatus*, Africa

3683.

Helochares lividus, *Helochares punctatus*, *Helochares obscurus*, Europe 7170.

high-altitude environment, abundance, *Lirionyma hudsoniense*, Argentina 6704.

historical account, bibliographies, *Hippotion oisris*, Spain 3142.

historical account, *Pareuchaetes pseudoinulata* 6079.

host plants, ecological distribution, *Cerambycidae*, USA, Texas 1944.

host plants, range, 10 species, pests, *Scitrothrips* 1261.

host plants, reviews, *Uroleucon* 6808.

Hylaeus, Australia 4749.

identification, *Nonarthra cyaneum*, Panama 7126.

introduced species, *Apis mellifera*, South America 3948.

introduced species, indigenous species, *Psocoptera*, Hawaii 7888.

introduced species, morphology, *Poeciloryctus formicophilus*, USA 6333.

introduced species, *Psallus salicellus*, Canada, British Columbia, 4007.

Jalysus spinosus, *Jalysus wickhami* 3947.

keys, *Shariphora* 1653.

keys, taxonomy, *Caledonia* 810.

life cycle, predators, *Aphidletes*, Yugoslavia 3552.

life history, *Adoryphorus coultoni*, New Zealand 453.

life history, *Coleophora miivipennis*, *Coleophora alnfoliae* 5881.

life history, host plants, flight activity, *Hemileuca groti* 7508.

life history, mating behavior, *Icius hamatus* 4331.

life history, *Metocous paradoxus* 5517.

life history, morphology, developmental stages, *Eurycnemus crassipes* 4928.

life history, morphology, *Pseudopholus panoptes* 5138.

life history, morphology, *Selidosema plumaria*, *Selidosema brunearia*,

Czechoslovakia 7104.

literature reviews, larvae, *Lucanidae* 2501.

Litodactylus leucogaster, North America 1969.

Lygaeidae, South Africa 8801.

males, life cycle, *Tabanidae*, France 9113.

marine environment, new species, *Agave verrucosa*, *Agave hirtellus* 3966.

Megacephala euphratica, Mediterranean Region 2733.

Monobia, USA, Texas, Mexico 2369.

morphology, *Arhopalus rusticus*, British Isles 6304.

morphology, *Goenidae* 8005.

morphology, *Hamaba*, *Hamaba dispersa*, morphology, geographical distribution,

taxonomy 1601.

morphology, *Hastella*, Australia 2473.

morphology, keys, *Lisrophoridae* 2384.

morphology, keys, *Nycteriboscinae*, Philippines 871.

Geographical distribution, (continued)

- morphology, *Pherbellia*, North America 3203
 morphology, taxonomy, *Aenictus decolor* 38
 morphology, taxonomy, *Agra* 4792
 morphology, taxonomy, keys, *Gnomonius* 1597
 morphology, taxonomy, *Labidopoda*, USA, Texas 5586
 morphology, taxonomy, new species, *Ancylotoma*, China, People's Rep 841
 morphology, taxonomy, *Sepsis*, Italy 3998
 morphology, taxonomy, *Staphylinidae*, New Guinea 2398
 morphology, taxonomy, *Taeniaptera*, Brazil 3992
 morphology, *Trichillum hirsutum*, Brazil 4109
 nests, environmental effects, forests, *Furcata rufa*, France 6850
 new genera, *Noemacrus*, East Asia 1043
 new records, *Acanthoscelides pallidipennis*, Europe 1932
 new records, *Acartophthalmus nigrinus*, Agathomyia, Eue 7889
 new records, *Acentropus niveus*, Switzerland, Geneva L. 779
 new records, *Aceria* sp., Sweden, Abisko 4713
 new records, *Aleria macana*, USA, Virginia 3161
 new records, *Acroera globulus*, *Limnia padulicola*, *Sphaerophoria loewi*, Ireland 4706
 new records, *Acrotichis insularis*, Finland 7897
 new records, *Aculops niphoclaedei*, India 7137
 new records, *Agria aedon rodriguezi*, Costa Rica 7233
 new records, *Agromyzidae*, Iraq 5522
 new records, *Alluodius fuscipes*, India 4000
 new records, *Alicinae*, China, People's Rep. 6322
 new records, *Alicinae*, India 7160
 new records, *Andrena haynesi*, USA 5527
 new records, *Andrena haynesi*, USA, Illinois, Henderson Co. 9495
 new records, *Anthidellium tollicum*, USA 7115
 new records, *Anthochoris euphenoides*, *scolantides orion*, Spain 3138
 new records, *Anthomyiidae*, India 7913
 new records, *Apanteles*, Hungary 3157
 new records, *Apataria erminea*, Australia, North Queensland 2375
 new records, *Aphididae*, India 4734
 new records, *Aphididae*, India 7909
 new records, *Aphididae*, India 8688
 new records, *Apion lethierryi*, Bulgaria 4710
 new records, *Arachnida*, Austria, North Tyrol, Central Alps 7069
 new records, *Araneae*, Pakistan, Lahore 9488
 new records, *Asolcus semistriatus*, Turkey 7989
 new records, *Baetis*, Philippines 7191
 new records, *Balechula*, Panama 6422
 new records, *Bombus*, Iceland 786
 new records, *Botocudo fraterus*, *Botocudo signanda*, India 7911
 new records, *Brachystola magna*, Canada, Newfoundland 3160
 new records, *Brahmaea ledereri*, Turkey 5513
 new records, *Brasiliolus bucki*, Brazil 8739
 new records, British Isles, England, Cornwall Co., *Ipimorpha reusa* 9443
 new records, caves, *Glacioclella bethysensis*, USA, Wyoming 8702
 new records, *Ceriontos*, USA, Indiana 1646
 new records, *Chalcidoidea*, *Proctotrupidae*, Poland 9467
 new records, check lists, *Hydropsychoidea*, USA 8693
 new records, check lists, *Rhyacophiloidea*, USA 8694
 new records, *Chrysomelidae*, USA, Missouri 4740
 new records, *Chrysops anthrax*, *Hybomitra nigella*, USSR, Amur 9462
 new records, *Claoderes mexicanus*, *Cephalobus macrocephalus*, Bolivia 7157
 new records, *Cephiasia stephensiana*, Canada 8699
 new records, *Coccioidea*, Hungary 2441
 new records, *Coelioxys bisoncornua*, USA, East 9494
 new records, *Coleoptera*, Sweden 3943
 new records, *Coleoptera*, Sweden 7089
 new records, *Coleoptera*, Sweden 7092
 new records, *Coleoptera*, Sweden 7094
 new records, *Coleoptera*, Sweden, Gotska Sandöen I 4704
 new records, colonies, *Trigona*, South Africa 2372
 new records, *Coniopterygidae*, Sri Lanka 4901
 new records, *Cordidae*, New Caledonia, Papua New Guinea 8800
 new records, *Culicoides*, Israel 9480
 new records, *Culiceta melanura*, Canada, Newfoundland 6331
 new records, *Curculionidae*, Spain, Teneo, Morade Rubielos 5518
 new records, *Cynophragmatocula*, *Hydrocyphon segrei*, Iran 3978
 new records, *Dasyphlea oppressa*, *Mycetobia divergens*, Canada, British Columbia 5526
 new records, *Dendrolimus bendeni*, India 4739
 new records, *Dendrocterus protuberans*, USA, California 7121
 new records, *Diachlorus*, North America 7970
 new records, *Diorctia schuetzeella*, British Isles 6306
 new records, *Diptera*, Czechoslovakia 3937
 new records, *Diptera*, Sweden 3945
 new records, *Dolania*, USA, Louisiana 3164
 new records, *Dorytomus salicinus*, British Isles, England, Cumbria 6298
 new records, *Drosophila fuscipennis*, *Drosophila trapeziformis*, *Drosophila unipunctata*, India 7175
 new records, *Drosophilidae*, Australia, Torrens Strait 3953
 new records, *Dryops anglicanus*, British Isles, Scotland, Lurgie L. 5508
 new records, *Ectobius sylvestris*, USA, New York 2472
 new records, *Ephemeroptera*, Turkey, Iran 4006
 new records, *Euraea melanoccephala*, Nebraska, Volume I 6321
 new records, *Eucamptus juglandis*, USA, Alabama 9099
 new records, *Eutretomus*, Southeast Asia, New Guinea 3149
 new records, *Euryurus maculatus*, *Euryurus cingulatus*, *Euryurus leschni fraterus*, USA 4911
 new records, *Fenusaia*, Asia 2447
 new records, *Fnesia sublimis*, Mexico 8781
 new records, *Goetheana parvipennis*, Bahama I 4744
 new records, *Grapholita delincana*, North America 9491
 new records, *Gryllomorpha dalmatina*, *Tetrix undulata*, Switzerland 9465
 new records, *Gynnis pullatus*, Sweden 7102
 new records, habit, *Asaphidion flavipes*, USA, Connecticut 8696
 new records, habit, *Spanglerogynis albivertus*, USA, Alabama 5139
 new records, *Heteranthrus acens*, Switzerland 7095
 new records, *Heteromera senescens*, Sweden 7090
 new records, *Heteromurus strebeli*, Ecuador 1988
 new records, host plants, *Phyllocolpa violae*, Egypt 7103
 new records, host plants, USA, Missouri, *Cerambycidae* 8698

Geographical distribution, (continued)

- new records, *Hydora*, South America 3167
 new records, *Hydrana bohemica*, German Dem. Rep., Thuringia 4716
 new records, *Hygloclonus lenkorana*, *Trachysphaera rotundata*, *Floria hircana*, *Brachyscelus ferrugineus*, Iran 851
 new records, *Hyphidrus ovatus*, Finland 7895
 new records, *Ichnumonidae*, Sweden 4724
 new records, introduced species, *Delia coarctata*, North America 3158
 new records, *Indomymex humilis*, Switzerland 7091
 new records, islands, *Sphecodes crastatus*, Baltic Sea 3942
 new records, *Iapyx solifusus*, India, Poona 5521
 new records, *Lancobus enchsion*, *Derodontidae*, British Isles 5509
 new records, larvae morphology, *Ecdyonurus macani*, Czechoslovakia 777
 new records, *Lathraeum proloungatum*, *Mycetoporus sanctissimus*, *Sepophilus constans*, *Aetha cellaria*, Switzerland 7099
 new records, *Leiodes rufipennis*, *Leiodes gallica*, Sweden 7093
 new records, *Leptodactyla*, Italy, Calabria 3144
 new records, *Leptodactyla*, Italy, Calabria 7098
 new records, *Leptocera rostrata*, Nearctic Region 3201
 new records, *Leptophantes*, Europe, Alps 7899
 new records, *Leucopis*, British Isles 9442
 new records, *Leucospis atriceps*, *Leucospis morawitzi*, *Leucospis rieki*, *Leucospis biculata*, *Leucospis australis*, *Leucospis giraulti*, *Leucospis aruna*, Australia 2458
 new records, *Limnephilus fenestratus*, *Lenarchus bicornis*, *Glaenocoona propingua propingua*, *Limnephilus bipunctatus*, Finland 8673
 new records, *Liopoda serricornis*, *Alechara spissocornis*, *Grammoplectus spinolae*, *ptilum horionii*, Sweden 4726
 new records, *Lymnaea dispar*, Canada, Newfoundland 8692
 new records, *Mastococcus resouae*, USA, Pennsylvania 3163
 new records, *Mayeria pearse*, USA, Indiana 8701
 new records, *Meximena thalassium*, USA, Rhode Island, USA, New York 5525
 new records, *Melittaea deione*, *Heodes titurus*, *Iolana iolas*, *Plebejus argus*, *Cyaniris semiargus*, *Geogenes nostrodamus*, Spain 7076
 new records, *Metealla pruina*, Palearctic Region 4715
 new records, *Micromid haldani*, *Micromysus*, *munimus*, *Aetha taxicoroides*, *Griophana pyrodes*, *Platycis minutus*, *Triplax aenea*, British Isles, Berkshire 6313
 new records, *Microlepidoptera*, Hungary 8684
 new records, *Microlepidoptera*, Sweden 4722
 new records, *Microlepidoptera*, Sweden 7085
 new records, *Microsania straeleni*, British Isles 5510
 new records, *Mimix mexicanum*, USA 2368
 new records, *Mordae*, USA, Florida 5534
 new records, morphology, *Acanthomyia*, West Africa 4747
 new records, morphology, *Adactynus*, India 7275
 new records, morphology, *Gloima tuscipennis*, Belgium 7892
 new records, *Musca cassara*, Australia 5538
 new records, *Myrmedobia exilis*, Nearctic Region 3151
 new records, *Myrmica jobi*, Czechoslovakia 8737
 new records, *Najacellidae*, India 7141
 new records, *Neima gothi*, *Lacinius ephippianus*, *Mitopus minor*, Eire 6311
 new records, *Nemobrenthus aeneipennis*, Brazil 8755
 new records, *Neobattella puerilis*, Brazil 9499
 new records, *Neophoxenus flavicornis*, *Neophoxenus lapponicus*, *Neophoxenus scutellatus*, *Czechoslovakia* 778
 new records, *Neopodasemus similis*, Bhutan 4827
 new records, new species, *Ephemeroptera*, Canada 1577
 new records, new species, *Fergusonina syzygia*, India 4831
 new records, new species, *Hilpinus nearcticus*, USA 4811
 new records, new species, *Microdites*, Nepal 18
 new records, *Nycteribidae*, Sweden 3946
 new records, *Ochropheura fenassa*, British Isles 6302
 new records, *Opetidae*, *Platypteriidae*, Czechoslovakia 2358
 new records, *Opunae*, *Microgasterinae*, Hungary 8687
 new records, *Orbitidae*, India, Bhutan 6346
 new records, *Orthetrum brunneum*, Austria, North Tyrol 7070
 new records, *Oxytelus* 2371
 new records, *Pachynematus smithae*, British Isles 4034
 new records, *Panorpa sulcifrons*, *Lephyphautes lephyphantisformis*, *Amilenus aurantiacus*, Belgium 9483
 new records, parasites, *Miniopterus*, *Calcaromyobia*, Africa 4766
 new records, parasites, *Speleognathopus galli*, Brazil 6334
 new records, parasites, *Vavraia culicis*, *Ascogreganna*, *Aedes polynesiensis*, Tokelau I 9196
 new records, pathogens, *Entomophthora*, Insecta, Finland 5721
 new records, *Panorpa*, Canada, Ontario 8691
 new records, *Paupodidae*, *Eurypteroptera*, USSR 4070
 new records, *Phantia ferganensis*, Turkey 4735
 new records, *Phlebotomus chinensis longiductus*, *Sergentomyia suni*, China, People's Rep., Zhejiang Province 2422
 new records, *Phragmatocula albidia*, *Hepalus adriaticus*, Greece 4731
 new records, *Phrinctopyga occidentalis*, USA, Texas 2362
 new records, *Philophorus confusus*, *Orthotylus nassatus*, *Orthotylus viridinervis*, Canada 4741
 new records, *Plusia chryson*, Sweden 7083
 new records, *Plusia mandarina*, Sweden, Uppland 4714
 new records, *Poanes yehi*, USA, Kentucky 9479
 new records, *Polemistes abnormis*, Austria, Scheibbs Region 4729
 new records, predator-prey interactions, *Nilaparvata lugens*, *Coccinella bilineata*, *Oenopus*, *Pasden fuscipes*, *Pasdenus achemillata*, Canada, Nova Scotia 7119
 new records, rare species, *Macrolepidoptera*, Sweden 7086
 new records, rare species, *Microlepidoptera*, Sweden 4723
 new records, repopulation, *Xerolepta interrupta*, USA, Illinois, Henderson Co. 9493
 new records, *Rhaphomyia nitidula*, *Xylophagus compedius*, *Dryodromia testacea*, Czechoslovakia 7901
 new records, *Rhinoceros*, USA 790
 new records, *Rhopalus tigrinus*, North America 6332

Geographical distribution, (continued)

- new records, rivers, Chironomidae, France, Pyrenees 819.
 new records, *Saturnia pavonia*, British Isles 6300.
 new records, Sciatidae, USSR 6396
 new records, *Scotantodes orion*, *Cupido minimus*, *Euphydryas desfontaini*, *Mimas iliae*, *Hemaris nylus*, Iberian Peninsula 7078
 new records, Scolytidae, West Indies 7157
 new records, *Scolytus multistriatus*, Ireland 4707
 new records, *Scymnus suturinus*, North America 6330.
 new records, *Seromyia* 7961
 new records, Siphonuridae, USA, Southwest 7113.
 new records, sol, Onbates, India, Orissa 9487
 new records, *Solenopsis invicta*, Puerto Rico 4642
 new records, *Sphaerolaelaps holothyrus*, USSR 9474.
 new records, Sphecidae, Sweden 7087
 new records, Staphylinidae, German Dem. Rep., Potsdam, Rietzer See 4711.
 new records, Staphylinidae, Maltese Is. 4746.
 new records, *Stigmella svenssoni*, *Trifurcula crypella*, *Trifurcula hannoverella*, Aethes dilucida, Denmark 5515
 new records, streams, Tachinopteryx, USA, Colorado 3165
 new records, surveys, Aphididae, India 7110
 new records, *Sussaba placita*, Palearctic Region 4031
 new records, Symphyla, USSR 7100
 new records, *Tanytarsus cofimani*, USA, North Carolina 7117
 new records, Tarsinacinae, New Guinea, Australia 7884
 new records, taxonomy, morphology, Napheluis, India 7194
 new records, *Telenomus asaii*, Hungary 8685
 new records, Tenthredinidae, British Isles 7886
 new records, Tetranychidae, India 7910
 new records, *Tinea columbanella*, British Isles 5511.
 new records, Trichogramma, Hawaii 820
 new records, Tricholeichotia, Australia 8703
 new records, Tricholeichotia fagesii, *Tnaenodes similans*, Denmark, Gudenaa R. 6317
 new records, *Tnepeolus mesilae*, USA, Illinois 5535
 new records, *Tychius crassirostris*, British Isles 6303
 new records, *Valgus hemipterus*, USA, Michigan 1954
 new records, *Xylella lunifera*, Iberian Peninsula 7077.
 new records, *Zizeeria knysna*, Malda 9468
 new records, *Zygona ephialtes*, Greece 4732.
 new records, 11 species, Nepticulidae, Netherlands 6320
 new species, Aradidae, Mexico 31
 new species, *Archilestes latalatus*, Central America 1666
 new species, *Axonopsis guadarumensis*, Spain 13
 new species, *Basilobella parmata*, Japan 8
 new species, *Drosophila manihoti*, Africa 1624
 new species, *Dretila mixta*, Honduras 29
 new species, *Edwardsia confusa*, Australia, New South Wales 3193.
 new species, *Lygaeosoma*, China, People's Rep. 824
 new species, morphology, *Trechogramma juliano*, USA, New York 4867
 new species, morphology, *Zale chivosensis* 5603
 new species, *Nanorchestes antarcticus*, *Nanorchestes bellus*, *Nanorchestes laiae*, *Nanorchestes brekenstae*, Antarctica, Victoria Land 4703.
 new species, *Nanorchestidae*, Antarctica, Victoria Land 8722.
 new species, *Orolemites tianshanica*, USSR 16.
 new species, *Oxyethira dunbartonensis*, *Oxyethira sinsignis*, *Oxyethira leonensis*, USA 850.
 new species, *Pteromalidae*, Asia 35.
 new species, taxonomy, morphology, *Myaptex acutus*, Chile 7178.
 new species, *Xestia*, North America 40.
 new subspecies, *Libellodes longicornis veronensis*, Europe, Alps 4058
 occurrence, *Agonopterix astrantiae*, British Isles, Wales 6299.
 occurrence, *Allysioborus koenigi*, France, Spain 9458.
 occurrence, *Argas roberti*, *Ornithodoros savignyi*, *Otobius megnini*, India, Tamil Nadu 9216.
 occurrence, Cicindela, Canada 9496
 occurrence, *Caenaphalocroceus medialis*, Japan 9475.
 occurrence, *Euphyes bimaculata*, USA, North Carolina 8690.
 occurrence, historical account, Coleoptera, Sweden 3941.
 occurrence, *Leioderus kollari*, France 9472.
 occurrence, Microlepidoptera, Inner Hebrides Is. 6315.
 occurrence, *Orellia falcata*, *Dibryna gutturalis*, British Isles 6310.
 occurrence, *Perlamantis aliberti*, France 9459.
 occurrence, *Phyllotreta*, Canada, Saskatchewan 5531.
 occurrence, *Pollistes gallicus*, Belgium 9484.
 occurrence, *Polydorus inustus*, France 9457.
 occurrence, *Polypheila*, Mexico, Baja California 5532.
 occurrence records, *Thymelicus lincola*, Canada, Manitoba 3159.
 occurrence, *Vespa germanica*, *Vespaula vidua*, Canada, Manitoba 3931
Opilio ravennae, German Dem. Rep. 4720.
 origin, Chrysidoidea, Neotropical Region 2374.
 origin, zoogeography, islands, Coccidae, Indian Ocean, West 4708.
Paraliris kriebbaumeri, *Paraliris truncatus*, *Paraliris sycorax*, Oriental Region 9490
 parapatric populations, surveys, *Aponomma hydrosauri*, *Amblyomma albolimbatum*, Australia, Western Australia 5218
 parasites, *Amblyomma*, *Aponomma*, *Reptilia*, Australia 3584.
 parasites, apiculture, *Varroa jacobsoni*, *Apis mellifera* 2816.
 parasites, Arthropoda, Mammalia, New Zealand 1231.
 parasites, *Chrysobaris larinellae*, *Coleophora larinella*, North America 3028.
 parasites, *Mitonyssus*, *Chiroptera*, South America 10.
 parasites, new records, Siphonuridae, Mammalia 4743.
 parasites, new species, Trombiculidae, *Rousettus amplexicaudatus*, *Rallus torquatus*, Philippines 794.
 parasites, surveys, *Heterodoxus*, *Petrogale*, Australia 2921.
 pests, agricultural lands, *Agrotis ipsilon*, India 5367.
 pests, crop fields, *Mayetiella destructor*, *Triticum*, USA 2191.
 pests, new records, *Pecillips cardamomi*, Japan, Taiwan 2359.
 pests, ornamental plants, *Hyadaphis tatarica*, *Lonicera*, USA 7793.
 pests, remote sensing methodology, *Datana intergerima* 8855.
 pests, taxonomy, *Coccus celatus*, Papua New Guinea 3215.
Pherbina coryleti, *Pherbina intermedia*, *Pherbina bipunctatana*, *Pherbina testacea*, Belgium 6323.
 phylogeny, biogeography, photoperiods effects on, Lepidoptera 2136.
 phylogeny, Oxythrya, Mediterranean Region 1704.
 phylogeny, taxonomy, *Amphizoa kashmirensis* 4789.

Geographical distribution, (continued)

- phylogeny, taxonomy, morphology, *Megacanthaspis* 7202.
Pineus brenneri, *Pineus coloradensis*, USA, New England 8697.
 Podagrionina, USA, Florida, South America 1654.
Polybia jurinei, Brazil 6222.
 population density, abundance, *Anopheles maculipennis*, Yugoslavia 3635
 population density, Dryopodidae, USA, Virginia, Clinch R., USA, Virginia, North Fork Holston R. 4658
 population dynamics, *Culex pipiens*, Africa 1316.
 population genetics, enzymes heterozygosity, *Drosophila* 2349.
 population structure, polymorphism, enzymes, *Drosophila pseudoobscura* 3127.
 population studies, *Aedes aegypti*, USA, Arkansas 640.
Prionus coriarius, German Dem. Rep. 4718.
 Pezini, British Isles 6312.
Pseudodotonyx 8818
 range, *Caloptilia rufipennella*, British Isles 6314.
 range extension, *Aleuroperyx juniperi*, USA 3944.
 range extension, Bocharia, USA, Texas 3171.
 range extension, *Halysidota harrisii*, USA, Florida 5533.
 range extension, *Hylemya fugax*, USA, Virginia 30.
 range extension, *Micromus timidus*, India 7111.
 range extension, new records, *Acanalonia conica*, USA, Northeast 2367.
 range extension, *Polygona comma*, Canada, Newfoundland 5523.
 range extension, records, *Plecoptera*, USA, Alaska 7019.
 range, habitat preferences, *Phylloreta strotata*, Canada, Saskatchewan 4335.
 range, introduced species, *Harpalus rufipes*, North America 3153.
 range, 7 families, *Heteronera*, Europe, Carpathian Mts. 8676.
 records, Asia, Australia 1581.
 records, *Culicidae*, *Anophelinae*, Niger 628.
 records, identification keys, *Trypoxylon*, Australia 1582.
 records, occurrence, aquatic environment, *Simulium defoliarti*, *Prosimulium onychodactylum*, USA, California, San Geronimo Mts. 1572.
 views, Chrysidae, North America 7112.
Rhyacophilidae, Canada 6462.
Scaptiscus vicinus, *Scaptiscus aetulus*, USA, Southeastern states 2360.
 Scarabaeinae, Panama 6376.
 seasonal variations, *Tabanus abactor*, USA, Texas 2361.
Slaterocoris pallipes, USA 2776.
 species composition, *Culicidae*, USSR 9460
 species composition, *Ectinomyia*, USSR 5325.
 species composition, *Geometridae*, Italy 7116
 species composition, habitat, *Orthoptera*, Scandinavia 6318.
 species composition, *Lepidoptera*, Austria, Tyrol 7068.
 species composition, surveys, *Hemiptera*, Czechoslovakia 3213.
 species composition, surveys, *Rhynchophila*, Hungary 3940.
 species composition, *Symphyla*, Canada, Alberta, George L. 7818.
 species diversity, environmental conditions, bogs, *Chironomidae*, Eire 7806.
 8 species, *Paracetes*, Oriental Region 6410.
 species richness, abundance, latitude, *Ichnemoumidae* 1966.
 spermatophores, occurrence, *Baculum extrudentum*, *Phasmoda* 5805.
 strains, growth, development, *Simulium decorum*, USA 2793.
 strains, population genetics, gene localization, protein composition 2350.
 streams, rivers, Insecta, Australia, New Zealand 3952.
 surveys, 1579.
 surveys, *Acridomorpha*, *Gambia* 780.
 surveys, disease reservoirs, *Culicidae*, Australia, Ord R. 671.
 surveys, *Geometridae*, Italy 3143.
 surveys, *Glossina tachinoides*, Togo 1326.
 surveys, *Hyoloxys pinastri*, Spain 3140.
 surveys, mapping, *Glossina*, Mali 1312.
 surveys, new species, *Brachyera*, Czechoslovakia 2356.
 surveys, *Oniscoidae*, Poland 788.
 surveys, pheromone traps, sampling, *Dipiron similis*, USA, North Carolina 8552.
 surveys, population studies, *Odontia*, Czechoslovakia, Muran Highlands 2357.
 surveys, *Pseudodactylus*, Brazil 4745.
 surveys, records, *Gasteropitidae*, Austria 4733.
 surveys, species composition, *Staphilinidae*, Mongolia, People's Rep. 3934.
 surveys, *Tenebrionidae*, Asia 781.
 surveys, traps, *Thysanoptera*, Hungary 3156.
 Tabanidae, Paraguay 7125.
 taxonomic revision, *Curtonomorphs*, Australia, New Zealand 4064.
 taxonomic revision, new taxa, morphology, *Disemulus*, North America 5549.
 taxonomy, *Anopheles*, France, Lyon 1571.
 taxonomy, *Hoplia*, North Africa 1600.
 taxonomy, keys, *Calyptopogon* 26.
 taxonomy, morphology, *Acnemia* 6402.
 taxonomy, morphology, *Ancuadella* 6453.
 taxonomy, morphology, *Anthomyiidae*, Australia 5574.
 taxonomy, morphology, *Anthomyia*, Japan 7177.
 taxonomy, morphology, *Aphodius*, Italy 3981.
 taxonomy, morphology, keys, *Pogonomyrmex* 7217.
 taxonomy, morphology, keys, *Rhombognathus* 6351.
 taxonomy, morphology, *Lasius*, Asia, Himalayan Mts. 5590.
 taxonomy, morphology, *Micropezidae*, South America, Amazon R. Basin 4830.
 taxonomy, morphology, *Muelleraella* 7204.
 taxonomy, morphology, new species, new genera, *Pocillocooccus longilobus*, Australia 827.
 taxonomy, morphology, *Odontotermes* 5548.
 taxonomy, morphology, *Parakanchia*, *Soreutoneura*, New Guinea 837.
 taxonomy, morphology, *Simulium amazonicum*, Brazil 3196.
 taxonomy, morphology, *Ulixus* 6371.
 taxonomy, morphology, *Uroplata* 2401
 taxonomy, morphology, *Xyleborini*, Hawaii 7165.
 taxonomy, *Mycomyini* 5569
 taxonomy, *Odontotermes* 5548
 taxonomy, *Orbiter*, India 7151.
 taxonomy, South America, *Oxophora atropica* 2370.
Tetanocera montana, Belgium 9485
 Tetranychidae, new records, India, Punjab 7912.
 Tetrathelids pollen, Africa 7906.
Thylodrias contractus 1703.
 transmission, *Bacillariophyceae*, Insecta 564.
 USA, Microdon 2427.
 vectors, yellow fever, *Aedes fuscifer*, *Aedes taylori*, *Gambia* 3658
 vegetation patterns, water management effects on, disease transmission, African trypanosomiasis, *Glossina* 1344.

Subject Index

Geographical distribution, (continued)

- world, surveys, Dryopidae, Elmidae, Psephenidae 5507.
Xylösandrus germanus, North America 7919.
 zoogeography, Hilaria, USSR 7905
 zoogeography, Lepidoptera, Canada, Alberta 7916.
 zoogeography, Microspectra 7974.
- Geoka urticulata**,
 pests, effects on plants roots 726
 population-environment relations, morphology, niche pattern 3629
- Geolycosa domifex**,
 activity patterns, diel variations, burrowing behavior 1186.
- Geolycosa pilcel**,
 wound healing, physiology 1092.
- Geometridae**,
 geographical distribution, species composition, taxonomy, Italy 7116
 identification, taxonomy, morphology, Canada 5654.
 pupae, morphology 80.
 surveys, phenology, systematics, geographical distribution, Italy 3143.
 taxonomy, morphology, synonymy 4894.
- Geonimorphology**,
 effects on species diversity, peninsular effect, Carabidae, Canada, Manitoba 5125
 mounds, colonial characteristics, Isoptera 3844.
- Geomydoecus californicus**,
 reviews, parasites, taxonomy, morphology, parasites, Thomomys 85
- Geomylichus (Ageomylichus)**,
 new genera, morphology 2384
- Geomylichus (Whitakerobius)**,
 new genera, morphology 2384
- Geomyaspinus bellicosus**,
 carrion, community composition, succession, Costa Rica 5166.
- Geomyza brevicauda**,
 new records, geographical distribution, Czechoslovakia 3937.
- Geophilomorpha**,
 ultrastructure, coxal organs, epithelium 6593.
- Geophilus longicornis**,
 antennal sensilla, antennal hair, ultrastructure 6528.
 antennal sensilla, sensilla basiconica, ultrastructure 7305
- Geotibia carli**,
 synonymy, Sipalia lindrothi 4787.
- Geotaxis**,
 escape behavior, caves, Troglolophilus cavicola 5861.
 gravity receptors, Arenivaga 2538.
 orientation, magnetic fields, Apsis mellifica 3537.
 phototaxis, vertical distribution, Drosophila 2750.
- Geotrupes**,
 environmental impact, coprophilous organisms, forage production, Cynodon dactylon 1252.
 new species, new subspecies, Nepal 807.
 pasture, dung, recycling, economic importance, introduced species, USA 4654
- Geotrupes maritimus**,
 new species, morphology, taxonomy, Nepal 807.
- Geotrupes silvaticus**,
 sensilla, wings, histology, functional morphology, flight 7302
- Geotrupes stenosus**,
 new species, morphology, taxonomy, Nepal 807
- Germanium dissectum**,
 host plants, life cycle, Heliothis zea, Heliothis virescens, USA, Mississippi 2085
- Germ cells**,
 chromosomes transmission, population genetics, Drosophila melanogaster, USA, Texas 3126
 developmental stages, radioresistance, genetic factors, Drosophila melanogaster 2314
 embryogenesis, ultrastructure, Tetradontophora bielancensis 7428
 mutation, germ cells, sex determination, interference 3906
 mutation, sex determination, interference, Drosophila 3906
- German Dem. Rep.**,
 check lists, species composition, Noctuidae 7072
 geographical distribution, habitat, Tetragonia viridissima, Tetragonia cantans 7904
 geographical distribution, Opilio ravennae 4720
 geographical distribution, population decline, Pronotus coriarius 4718
- German Dem. Rep., Eberswalde**,
 collections, Dep. Taxon Insects, Inst. Plant Protection Res., Staphylinidae 6337
- German Dem. Rep., Greifswald**,
 surveys, rare species, Anisoptera, Aeschna viridis, Anacaechna socleles 4721
- German Dem. Rep., Leipzig**,
 population dynamics, species composition, crop fields, Araneae, Opiliones 4571
- German Dem. Rep., Leutra Valley**,
 niches, species composition, species diversity, association, grasslands, Auchenorhynchus 7584
- German Dem. Rep., Potsdam, Rietzer See**,
 new records, geographical distribution, Staphylinidae 4711
- German Dem. Rep., Thuringia**,
 habitat preference, activity patterns, development, species composition, Diplopoda 7588
 new records, geographical distribution, Hydraena bohemica 4716
 population dynamics, hibernation, Euscelis incisus 7575
- Germany, Dem. Rep.**,
 taxonomy, fauna studies, Noctuidae 1573
- Germany, Fed. Rep.**,
 breeding, population dynamics, annual cycles, environmental factors, Anopheles messeae messeae 3624
 dieback, population decline, role, infection, Dreyfusia, Abies alba 8342
 emergence, species composition, abundance, Empididae, Dolichopodidae 3865
 forest management, pests protection, reviews 1392
 nesting behavior, burrowing behavior, dunes, Colletes daveicani 7804
 new species, Erdontomerus iliesi, Anisopteromalus glaber 37
 parasites, infestation, seasonal variations, Ixodes trianguliceps, Mammalia 7547
 pesticide resistance, dimethoate, permethrin, Musca domestica 311
 population dynamics, crop fields, Contarinia tritici, Sinodiplosis mosellana 6859
 population dynamics, crop fields, pests, Coccinella septempunctata 9339
 population genetics, allozymes, polymorphism, Drosophila 7061
- Germany, Fed. Rep., Bavaria**,
 cattle pests, abundance, seasonal variations, Diptera 2184.
- Germany, Fed. Rep., Bavaria, Murnauer Moos**,
 Psychodidae, geographical distribution 4730
- Germany, Fed. Rep., Fichtelgebirge**,
 territorial behavior, aggressive behavior, Cordulegaster boltoni 8617.
- Germany, Fed. Rep., Schierenseebrooks**,
 environmental stress, water flow, distribution, dispersion, rheotaxis, fresh waters, Insecta 561
- Germination**,
 seeds damage effects on, Isoptera, Triticum 5331.
 seeds, Geophyza viridula predation, Rumex crispus, Rumex obtusifolius 6784.
- Germiplasm**,
 pest resistance, Zia mayas, Atherigera 7688.
- Geron aridus**,
 new records, parasitism, Elasmopalpus lignosellus, USA, Texas 3577
- Gerridae**,
 communication, vibratory stimuli, surface water, aquatic animals, reviews 5868.
 nomenclature, taxonomy, type specimens, India 7192.
- Gerris**,
 chromosomes, sex determination 8637
 life cycle, reproduction, Austria 7809
- Gerris buenoi**,
 habitat selection, dispersal, habitat preferences, environmental factors 3867
- Gerris comatus**,
 habitat selection, dispersal, habitat preferences, environmental factors 3867
- Gerris odontogaster**,
 overwintering, leaf litter, population density, ponds 6003
- Gerris pingreensis**,
 habitat selection, dispersal, habitat preferences, environmental factors 3867
- Gesoulia punctifrons**,
 anatomy, histology, reproductive organs, spermatheca 328
 spermatheca, histology 9034
- Getah virus**,
 isolation, Culex tritaeniorhynchus, Aedes albopictus cells 1348
 isolation, Culex vishnu, Philippines 1378
- Ghana**,
 ecological distribution, nests, shade effects on, Cataulacus guineensis 578
 food plants, pests, feeding, growth, Spodoptera litoralis 2849
 plant diseases, vectors, abundance, Coccidae, Pseudococcidae 1260.
- Ghilianella**,
 new species, morphology, Panama 1634
- Giant ascoms**,
 morphology, Peniplaneta 897
 palyton effects on, sodium, potassium channels, Peniplaneta americana 8176
 toxins, Peniplaneta americana, Androctonus australis 5801
- Gibraltair**,
 new species, taxonomy, morphology, Oruithomya rupes 6405.
- Gills**,
 morphology, ontogeny, larvae, Euphaedrae 6538.
 regeneration, Cloeon cognatum 1950.
- Gilpinia beryciniae**,
 amino acids metabolism, developmental stages 7318.
 pests, forest, feeding, food conversion 7696
 population density, limiting factors, food availability, Picea abies 2844
- Glaciacivola bathysciodes**,
 new records, geographical distribution, caves, USA, Wyoming 8702
- Glaciorocira propingua propingua**,
 new records, geographical distribution, Finland 8673
- Glands**,
 ablation prothorax reproduction, larvae, Heteropeza pygmaea 250
 aedeagus, anatomy, histology, secretion, males, Tenebrio molitor 4181.
 aggregation pheromone, histology, Tribolium castaneum 8115
 milk production, histochemistry, Melophaeus ovinus 3389
 molting, histology, Nemesis incerta, Sodra calcata, Legendrella pauliani 258.
 molting, sensitivity, juvenile hormones analogs, cell death, Oncopeltus fasciatus 8245
 pheromones, anatomy, males, Eldana saccharina 5017
 post-pharyngeal gland, secretion, chemical composition, queens, Solenopsis invicta 987
 proosomal glands, ultrastructure, Tetranychus urticae 3269
 prothorax, juvenile hormones sensitivity, Mamestra brassicae 3391
 prothorax, sensitivity, juvenile hormones, Mamestra brassicae 3387
 sex pheromone, morphology, histology, Lymantria dispar 5013.
 sex pheromone, storage, lipids, Dermacentor variabilis, Dermacentor andersoni 5008
 stings, poison apparatus, anatomy, comparison, Hymenoptera 5014
 trail pheromone, morphology, Camponotus ephippium 8978
 uterus, separation techniques, methodology, Glossina morsitans 61
 Van der Vecht organ, secretions, life cycle, Polistes federatus 6592
 venom, morphology, cytochemistry, Buthus famulus 8981
 waxes, integument, ultrastructure, Porphyrophora, Sphaerapsis, Eurhizococcus 243.
- Glaphyra shinali**,
 new species, Nepal 1609
- Glaucocypselus volans**,
 disease transmission, vectors, Rickettsia prowazekii, Dermacentor variabilis 1322
- Glaucopsyche lygdamus**,
 association, interspecific relationships, Formicidae 7600
- Glaucidium virens**,
 pathogens ingestion, pathogenicity, Reticulitermes 8150
- Glischnichilus fasciatus**,
 hosts, parasitism, new records, Hyalomys triangulifer 6760
- Globin**,
 loci, DNA genomes organization, Drosophila 7823
 precursors, protein biosynthesis, cell-free system, Chironomus thummi 3075
- Glocephylus trabeum**,
 decay fungi, effects on softwoods, food preferences, Coptotermes acinaciformis 1196
 wood, infection, bait, Isoptera 3250
- Gloma fuscipennis**,
 new records, geographical distribution, morphology, Belgium 7892
- Glomeris hexasticha**,
 habitat preference, activity patterns, development, German Dem. Rep., Thuringia 7588

- Glosseris marginata**,
habitat preference, activity patterns, development, German Dem. Rep., Thuringia 7588
- Glossina**,
auditory communication, sound production (biological) 2757
control programs, disease transmission, eradication, Africa 1362
control programs, disease transmission, trypanosomiasis, trapping, Congo, People's Rep. 9244
control programs, disease transmission, Upper Volta 1345
control programs, insecticides, effects on nontarget organisms, wildlife management 1346
culture systems, feeding methodology, infection, Trypanosoma 6476
cuticle lesions, abdomen, Kenya 4119
disease transmission, African trypanosomiasis, environmental factors, Uganda, Kenya 1347
disease transmission, control programs, African trypanosomiasis, cultural characteristics, man, Africa, East 1341
disease transmission, disease reservoirs, African trypanosomiasis, Africa, West 1339
disease transmission, environmental factors, African trypanosomiasis 1337
feeding behavior, host searching behavior, visual stimuli, olfaction 1201
feeding behavior, mechanical stimuli receptors, Trypanosoma transmission 2915
geographical distribution, surveys, mapping, Mali 1312
geographical distribution, water management effects on, vegetation patterns, disease transmission 1344
host searching behavior, visual stimuli, olfaction 1202
host-parasite interactions, pathology, Trypanosoma 1021
infestation, parasites, Hexameris glossinae 9213
new records, lesions, cuticle, abdomen 5659
pest control, disease control, Trypanosoma, reviews, Africa 6052
population dynamics, disease transmission, trypanosomiasis, Ivory Coast 9264
population genetics, African trypanosomiasis, epidemiology, 1336
population levels estimation, control programs, traps 2936
resting behavior, habitat preferences, environmental factors, Niger, Mozambique 1178
symptoms abundance, factors affecting 5173
traps, adhesives, efficacy 50
trypanosomiasis, disease transmission, epidemiology, Ivory Coast 9240
trypanosomiasis, African trypanosomiasis, disease control, Uganda 4495
- Glossina austeni**,
chromosomes, cytogenetics 6258
copulation, mating behavior 5841
cuticle lesions, histopathology 8163
insecticides effects on feeding behavior, circadian rhythms 5772
mating, effects on milk gland activity, feeding, blood meals 8229
salivary gland hypertrophy, infection, Kenya 8141
toxicity, endrin analogs 1072
- Glossina brevipalpis**,
disease transmission, African trypanosomiasis, environmental factors, Uganda, Kenya 1347
- Glossina brevipalpis**,
cuticle lesions, histopathology 8163
salivary gland hypertrophy, infection, Kenya 8141
vectors, African trypanosomiasis, disease control, Uganda 4495
- Glossina fuscipes**,
larviposition, neurophysiology, hormones 3496
- Glossina fuscipes fuscipes**,
disease transmission, African trypanosomiasis, environmental factors, Uganda, Kenya 1347
disease transmission, trypanosomiasis, Congo, People's Rep. 9243
vectors, African trypanosomiasis, disease control, Uganda 4495
- Glossina fuscipes quanzensis**,
flight range, capture-recapture studies, vectors, African trypanosomiasis, Congo, People's Rep. 4490
pest control, insecticides, decamethrin, traps, Congo, People's Rep. 4547
- Glossina fuscipes quanzensis**,
pest control, traps, efficacy, Congo, People's Rep. 9262
- Glossina fuscipes fuscipes**,
population growth, age composition, temperature effects 1307
- Glossina longipennis**,
ecological distribution, Trypanosoma infection, Kenya 3676
- Glossina morsitans morsitans**,
proclone effects on oogenesis, progeny 5093
- Glossina morsitans**,
accessory gland maturation, secretions, neurosecretion effects on 354
blood meals, hosts identification 2011
chemical control, deltamethrin effects on flight activity 314
chemoreception diets, Bos taurus, effects on, catchability, Zimbabwe 1173
deterrents, effects, mating behavior, homosexuality, sex pheromone 224
disease transmission, African trypanosomiasis 3675
disease transmission, infectivity, Trypanosoma congolense 1340
disease transmission, pathogens, salivary gland, Trypanosoma brucei 3674
dispersal, vegetation patterns effects on 2784
diuresis, ion transport inhibitors effects on 4994
factors affecting infection, Trypanosoma brucei rhodesiense 4525
fat body, lipid biosynthesis, hormones effects on 1751
fat body, proline synthesis, lipid metabolism, hormones 8089
fat body, uterus glands, separation techniques 61
mating behavior, marking, capture-recapture studies 1141
ovulation, mating effects on, neuroendocrine system 388
parasites, infectivity, genetic factors, Trypanosoma brucei 4185
pathology, parasites infection, gastrointestinal tract, Trypanosoma brucei rhodesiense, 1020
pest control, chemosterilization, sex pheromone 5268
population density, sampling, methodology, Niger, Mozambique 1281
population levels, population dynamics, sampling methodology 5274
reproduction, development, sterols effects on 355
salivary gland secretion, chemical composition 983
sex pheromone receptors, ultrastructure 974
sound production (biological), age effects on, hunger 260
apomorphoses, ultrastructure 325
susceptibility inheritance, Trypanosoma congolense infection 8158
toxicity, insecticides, aerosols, drift, pesticide resistance, Botswana 1469
vectors, pathogens, continuous culture, antigenic variants, Trypanosoma brucei 8149
- Glossina morsitans centralis**,
blood meals, infection rates, Trypanosoma vivax 8408
population growth, age composition, temperature effects 1307
population levels estimation, control programs, traps 2936
population studies, reproductive strategy 7614
vectors, Trypanosoma vivax transmission 3681
- Glossina morsitans morsitans**,
attractancy, sex pheromone, odors, chemosterilants 6084
blood meals, infection rate, Trypanosoma vivax 8408
blood meals, sterilization, methodology 8845
chemosterilization, control programs, Zimbabwe 3667
copulation, mating behavior 5841
cuticle lesions, histopathology, infectivity 8162
hematology 3308
mating behavior deterrents, cuticle lipids 8260
population genetics, genetic variance, enzymes, strains 7876
population genetics, pesticide resistance, mathematical models 3122
precoene effect on progeny sterility 2698
reproductive organs, semen receptacles, ultrastructure, histochemistry 3455
resting behavior, activity patterns, breeding status, gravid, virgin, females 5851
resting behavior, habitat preferences, environmental factors, Niger, Mozambique 1178
salivary gland secretions, proteins, infection effects on, Trypanosoma brucei 8155
sterile-release, role, transmission, Trypanosoma 5277
traps, attractants, efficacy, control programs, Zimbabwe 3670
traps, efficacy, Zimbabwe 3669
vectors, parasites sexual reproduction, Trypanosoma brucei 2631
vectors, Trypanosoma vivax transmission 3681
- Glossina morsitans submorsitans**,
blood meals, hosts, Mali 9126
catching methods, trapping, population dynamics, Nigeria 5616
resting behavior, habitat preferences, environmental factors, Niger, Mozambique 1178
- Glossina morsitans morsitans**,
Glossina morsitans centralis, population growth, age composition, temperature effects 1307
- Glossina nigrofusca**,
population levels, disease transmission, Ivory Coast 9238
- Glossina pallidula**,
population levels, disease transmission, Ivory Coast 9238
- Glossina pallidipes**,
abundance estimation, catching methods, Kenya 2479
activity patterns, diurnal variations, altipatric populations, geographical variations, temperature, Kenya 7525
attractancy, sex pheromone, odors, chemosterilants 6084
chemoreception, diets, Bos taurus, effects on, catchability, Zimbabwe 1173
chemosterilization, control programs, Zimbabwe 3667
chromosomes, cytogenetics 6258
cuticle lesions, histopathology 8163
disease transmission, African trypanosomiasis, environmental factors, Uganda, Kenya 1347
energy metabolism, fat reserves, feeding, population structure, Kenya 6866
hematology 3308
mating age, effects on ovulation, larvae production, receptivity 7423
parasites infection, seasonal variations, Trypanosoma, Kenya 1318
plantations colonization, effects on disease control, Trypanosoma, Africa 1267
population genetics, enzyme polymorphism, Kenya 6286
population growth, age composition, temperature effects 1307
population levels, population dynamics, sampling methodology 5274
rearing, population stability, source effects on, Kenya 574
salivary gland hypertrophy, infection, Kenya 8141
sex pheromone, isolation, characterization 3355
sex pheromone, sexual behavior 8254
traps, attractants, efficacy, control programs, Zimbabwe 3670
traps, efficacy, Zimbabwe 3669
traps, efficiency, comparative studies 48
vectors, African trypanosomiasis, disease control, Uganda 4495
virus-like particles transmission, feeding 8140
- Glossina palpalis**,
control, sterilization, irradiation, strontium 90, survival, sex differences 1470
ecological distribution, disease transmission, African trypanosomiasis, Africa, West 1343
mating behavior, males, sex pheromone effects on 213
pest control, insecticides 9251
population levels, disease transmission, trypanosomiasis, Ivory Coast 9238
population levels estimation, control programs, traps 2936
resting behavior habitat preferences, effects on pest control 436
- Glossina palpalis gambiensis**,
blood meals, hosts, Mali 9126
control programs, disease transmission, decamethrin, male sterility, Upper Volta 1345
pest control, insecticides, deamethrin, traps, Ivory Coast, Leraba R. 4550
population growth, age composition, temperature effects 1307
- Glossina palpalis palpalis**,
pest control, insecticides, deamethrin, traps, Congo, People's Rep. 4547
population density, ecological distribution, disease transmission, African trypanosomiasis, Ivory Coast 1342
population growth, age composition, temperature effects 1307
- Glossina tachinoides**,
catching methods, trapping, population dynamics, Nigeria 5616
control programs, disease transmission, decamethrin, male sterility, Upper Volta 1345
ecological distribution, disease transmission, African trypanosomiasis, Africa, West 1343
geographical distribution, limiting factors, Togo 1326
pest control, insecticides 9251
pest control, insecticides, deamethrin, traps, Ivory Coast, Leraba R. 4550
resting behavior, environmental effects, Africa, West 9185
resting behavior, habitat preferences, environmental factors, Niger, Mozambique 1178
- Glossinidae**,
disease transmission, trypanosomiasis, socio-economic aspects, Africa 652
dissection methodology, salivary gland, gut 4080

Subject Index

- Glossinidae, (continued)**
 pest control, insecticides, traps, economics, Ivory Coast 4549.
 trapping, methodology, traps, modification, attraction 4074.
- Glossosomatinae**,
 drift, environmental effects, Australia, A.C.T., Condor Creek 753.
- Gloveria medusa editha**,
 new subspecies, taxonomy, morphology, food plants, USA, California 7226.
- Glucosogenesis**,
 glucose metabolism, metamorphosis, *Sarcophaga ruficornis* 3329.
- Glucobacter**,
 association, *Apis mellifera*, beehives 8310.
- β -D-Glucopyranosyl-O-L-tyrosine**,
 biochemistry, development, larvae, *Plodia interpunctella*, *Ephestia cautella*,
Thyridopteryx ephemeraeformis 6519
- Glucose**,
 diets, phospholipid composition, *Exeristes roborator* 3313.
 hemolymph, comparative studies, hybrids, *Apis mellifera* 771.
 nutrients, rearing, media (culture), development, fecundity, *Corcyra cephalonica* 7452.
 rearing, media (culture), growth index, larvae, *Corcyra cephalonica* 7467.
 thorax levels, starvation detection, *Apis mellifera* 194.
- Glucose metabolism**,
 glucosogenesis, metamorphosis, *Sarcophaga ruficornis* 3329.
- Glucose-6-phosphate dehydrogenase**,
 genes localization, X chromosome, *Tribolium castaneum* 9387.
- Glucophosphate isomerase**,
 electrophoresis, *Toxorhynchites splendens*, *Toxorhynchites leicesteri*,
Toxorhynchites metallicus 5683.
- α -D-Glucosidase**,
 chloramphenicol inhibition, *Apis mellifera* 8936.
- β -Glucosidase**,
 enzymes, digestive tract, temperature effects, rhythms, *Halicta caerulea* 1745.
- β -Glucosyl-O-tyrosine**,
 hemolymph, larvae, *Bombyx mori* 2562.
- Glutamate**,
 uptake, *Schistocerca gregaria* muscles, venom effects on, *Phantrius triangulum* 5768.
- Glutamic acid**,
 chitins, cell membranes, muscles membranes, *Locusta migratoria* 1731.
- γ -D-Glutamyl-L-leucine**,
 effects on cardiac muscle, action potential, *Locusta migratoria* 241.
- γ -Glutamyltransferase**,
 enzymatic activity, pesticide resistance, developmental stages, sex differences,
 strains, *Musca domestica* 947.
- Glutathione transferase**,
 characterization, *Galleria mellonella* 176.
 characterization, *Musca domestica* 5696.
 enzymes, induction, pesticides, phenobarbital, toxicity, *Musca domestica* 5783
- Glycerol**,
 biosynthesis, diapause, carbohydrate metabolism, glycogen, *Chilo suppressalis* 3482.
- Glycerol-3-phosphate dehydrogenase (NAD⁺)**,
 isoenzymes, development, distribution, tissues, characterization, *Mormoniella vitripennis* 6553.
- α -Glycerophosphate dehydrogenase**,
 activity, flight, agitation effects on, *Ceratitis capitata* 8109
- Glycine max**,
 agricultural ecosystems, population dynamics, *Heliothis zea*, *Epilachna varivestris*, *Popillia japonica* 6141.
 biological control, pathogens, *Nomuraea rileyi*, *Lepidoptera* 716.
 crop fields, agricultural practices effects on pests abundance, *Insecta* 3035.
 crop fields, benomyl effects on population density, *Pseudoplusia includens* 2237.
 crop fields, community composition, *Arthropoda* 2164.
 crop fields, oviposition, seasonal variations, *Orius insidiosus*, *Nabis* 5322.
 crop fields, pest control, pathogens, baculovirus, *Pseudoplusia includens* 6138.
 crop fields, pest control, predators, *Anticarsia gemmatilis* 6148.
 crop fields, population density, predators, *Arthropoda*, USA, Virginia 6190.
 crop fields, sampling methodology, predators, *Insecta* 6145.
 crop fields, soybean mosaic virus vectors, landing behavior, *Aphididae* 3825.
 crop fields, vegetation patterns effects on community composition, *Insecta* 2888.
 crop fields, weed control effect on abundance, *Insecta* 2997.
 crop yield, damage, pest control, *Epilachna varivestris*, USA, Maryland 3795.
 crop yield, defoliation, pests, *Cynthia cardui*, *Platylabus scabra* 3781.
 cultivars, pest resistance, *Insecta* 6942.
 damage, *Ceratomya trifurcata*, *Alternaria tenuissima* infection 9277.
 defoliation, grazing, *Anticarsia gemmatilis* 2001.
 host plants, pest resistance, *Nezara viridula* 9353.
 leaves, grazing, larvae, *Lepidoptera* 1257.
 leaves, water loss, damage effects on, *Insecta* 6939.
 metabolism, agrochemicals, growth regulators, EL-494 4999.
 pest control, insecticides, pathogens, *Anticarsia gemmatilis*, *Cesotoma trifurcata* 2236.
 pests, crop damage, effects on seeds quality, *Ceratomya trifurcata* 8511.
 phenology, association, pests, population dynamics, *Nezara viridula* 8351.
 pollination, attractancy, *Apis mellifera* 5972.
- Glycogen**,
 diapause, carbohydrate metabolism, biosynthesis, glycerol, *Chilo suppressalis* 3482.
 energy resources, metabolism, developmental stages, *Stomoxys calcitrans* 4159.
 silk gland, cyanocobalamin, cobalt chloride effects on, *Bombyx mori* 6585.
- Glycogen phosphorylase**,
 activity, temperature, fat body, *Philosamia cyathia* 6563.
- Glycogen synthase**,
 activity, temperature, fat body, *Philosamia cyathia* 6563.
- Glycolipid composition**,
 phospholipid composition, pupae, *Bombyx mori* 166.
- Glycolysis**,
 3-deoxy-3-fluoro-D-glucose metabolism effects on, *Locusta migratoria* 6619.
- Glycoprotein composition**,
 webs, *Argiope* 937.
- Glycosidases**,
 characterization, digestive tract, muscles, *Valanga irregularis* 2565.
- Glycyphagus destructor, (continued)**
 enzymatic activity, lysozyme 1764.
 pest control, stored products, air flow 6092.
 stored products pests, chemical control, fumigants 1045.
- Glycyphagus destructor, (continued)**
 stored products pests, infestation, environmental effects, *Triticum* 7693.
- Glycyphagus domesticus**,
 allergens, house dust, man 1371.
 enzymatic activity, lysozyme 1764.
- Glyplipteridae**,
 inventories, world genera, taxonomy 6297.
- Glyplipterigidae**,
 taxonomy, morphology, distribution 5605.
- Glyptasida**,
 activity patterns, seasonal variations, USA, New Mexico 8284.
- Glyptotendipes baripes**,
 larvotypes, population genetics, USSR 4695.
- Glyptotendipes paripes**,
 abundance lakes, reservoirs, USA, Florida 8609.
- Gnathotermes tubiformans**,
 food preferences, seasonal variations, USA, Texas 482.
- Gnathosoma**,
 morphology, *Phorocera* 6497.
- Gnathotrichus retusus**,
 aggregation pheromone, lineation, allelochemic activity, biochemistry,
 competition 1776.
 catching methods, pheromone traps, wood 8573.
- Gnathotrichus sulcatus**,
 aggregation pheromone, lineation, allelochemic activity, biochemistry,
 competition 1776.
 surveys, pheromone traps, aggregation pheromone, sulcatol, Canada, British
 Columbia, Vancouver 1 5387.
- Gonats**,
 ear ectoparasites, *Railletia manfredi*, *Psoroptes cuniculi*, Australia 650.
- Goeldichironomus amazonicus**,
 benthos, Venezuela, Valencia L. 621.
- Goera schmidti**,
 new species, taxonomy, morphology, Thailand 8005.
- Goeridae**,
 morphology, geographical distribution 8005.
- Goetheana parvipennis**,
 new records, geographical distribution, Bahama Is. 4744.
- Gogli apparatus**,
 fat body, phosphorus localization, spectroscopy (photoelectron), *Insecta* 8937.
- Gomphocerinae**,
 pest control, pathogens, baiting 1398.
- Gomphocerus sibiricus**,
 population studies, heterochromatin 3900.
- Gomphonema externus**,
 larvae, benthos, burrowing behavior, substrate preferences, spatial distribution,
 streams 7023.
- Gonads**,
 atrophy, hybrids, sterility, *Drosophila simulans* 5067.
 differentiation, histology, *Drosophila* 1080.
 indole-3-acetic acid effects on histology, development, *Dacus dorsalis* 8227.
 morphology, sex determination, mutants, *Drosophila melanogaster* 6268.
- Gonatocerus sarawakensis**,
 new species, taxonomy, morphology, Malaysia 4037.
- Gondvanadellium bieli**,
 new genera taxonomy, morphology, South America 7949.
- Gondvanadellium seirotranoides**,
 new genera taxonomy, morphology, South America 7949.
- Gongrocnemus ignota**,
 new species, taxonomy, morphology 6454.
- Gongrocnemus peruviana**,
 new species, taxonomy, morphology, Peru 6454.
- Gongrocnemus veta**,
 new species, taxonomy, morphology, Brazil 6454.
- Gongyloaema pulchrum**,
 parasites, *Orthopagus gazella*, USA, Georgia, USA, Texas 9203.
- Gonia cinerascens**,
 females, reproductive organs, anatomy 2669.
 host-parasite interactions, body weight, growth, *Galleria mellonella* 2825.
 host-parasite interactions, juvenile hormones, hosts growth, *Galleria mellonella* 1964.
 hosts body weight, parasitism, pupae, *Galleria mellonella* 2822.
 parasites development, hosts population density, *Galleria mellonella* 2829.
 parasites, development, temperature effects on, *Galleria mellonella* 6772.
 parasites, hosts growth, juvenile hormones effects on, *Galleria mellonella* 6764.
 parasites, oviposition, artificial substrates 2823.
 parasitism, effects on body weight, *Galleria mellonella* 6765.
 parasitism, effects on larvae body weight, *Galleria mellonella* 6766.
 parasitism, hosts body weight, *Galleria mellonella* 2822.
 population dynamics, parasites, hosts population density effects on, *Galleria mellonella* 6773.
 rearing, artificial substrates, oviposition 6472.
 reproductive systems, morphology, females 6631.
- Gonia sagax**,
 traps, catches, oviposition 55.
- Goniodes colchici**,
 biometrics, morphology, parasites, *Phasianidae*, Spain, Cordoba 8045.
- Goniodes dispar**,
 biometrics, morphology, parasites, *Phasianidae*, Spain, Cordoba 8045.
 parasites, morphology, biometrics, *Alectoris rufa*, Spain, Granada 8051.
- Goniodes nebraskensis**,
 ectoparasites, *Pediceus phasianellus*, Canada, Manitoba 1230.
- Goniostrops**,
 morphology, defence secretions, mechanical properties 3381.
- Gonizus antipodum**,
 morphology, Australia 833.
- Gonizus collessi**,
 new species, morphology, Australia 833.
- Gonizus emigratus**,
 parasites, life cycle, reproductive behavior, *Paramyelois transiella* 6754.
- Gonizus jactatae**,
 new species, morphology, Australia 833.
- Gonizus mandibulatus**,
 new species, morphology, Australia 833.
- Gonotobis**,
 taxonomic revision, Australasian Region 7959.

- Gonolabis bidens**, new species, taxonomy, morphology, Australasian Region 7959.
- Gonolabis dentata**, new species, taxonomy, morphology, Australasian Region 7959.
- Gonolabis gilesi**, new species, taxonomy, morphology, Australasian Region 7959.
- Gonotrophic cycles**, age, host searching behavior, blood meals, *Leptoconops carteni* 8291.
- population studies, females, *Aedes africanus*, Uganda 1295.
- reproductive systems, oviposition, *Aedes malaysiensis*, *Aedes polynesiensis* 1854.
- Gossypus melanosoma**, parasitoids, host-parasite interactions, ecological distribution, altitude, *Coleophora alticola* 4371.
- Gonzalezinus**, new genera, taxonomy, morphology, Chile 4854.
- Gonzalezinus squamosus**, new species, taxonomy, morphology, Chile 4854.
- Gossypium**, agricultural practices effects on pests infestation, *Earias insulana*, *Pectinophora gossypiella* 6972.
- crop fields, infestation, effects on crop yield, *Pectinophora gossypiella* 3765.
- crop fields, mortality, developmental stages, *Anthonomus grandis grandis*, USA, Texas 6125.
- crop fields, pest control, allitun, *Pectinophora gossypiella*, *Earias*, *Heliothis armigera*, India 7701.
- crop fields, pest control, diflubenzuron efficacy, *Anthonomus grandis grandis* 8519.
- crop fields, pest control, mowing, *Heliothis zea*, *Heliothis virescens* 7713.
- crop fields, predators, pests, abundance, seasonal variations, Egypt 6971.
- crop protection, insecticides, *Amrasca devastans*, *Aphis gossypii*, *Heliothis armigera*, *Bemisia tabaci*, Thailand 4622.
- crop protection, pest control, economics, *Heliothis armigera*, *Earias vitella*, *Pectinophora gossypiella*, Sri Lanka 6110.
- crops, damage, economics, pests, infestation, *Heliothis* 4612.
- damage, infestation, pests, *Aphis gossypii* 6189.
- damage, pest control, *Heliothis*, Australia, New South Wales 2988.
- damage, pest outbreaks, *Macronellus*, India 7733.
- fairy acids, effects on growth, *Pectinophora gossypiella*, *Heliothis zea*, *Heliothis virescens* 4414.
- host plants, feeding behavior, larvae, *Heliothis* 6123.
- host plants, genotypes, olfactory preferences, *Earias vitella* 9080.
- host plants, oviposition, *Pectinophora gossypiella* 6157.
- host plants, pests, spatial distribution, sampling, *Tnchoplusia ni* 6107.
- host plants, varieties, pests development, *Amrasca devastans*, *Earias vitella* 7791.
- hybrids, pollination, agricultural practices, *Apis mellifera* 6182.
- nectar, effect on abundance, *Solenopsis invicta* 5971.
- pest control, insecticides, *Insecta*, Nigeria 5399.
- pest control, integrated control, *Insecta* 9319.
- pest control, *Normaea rileyi* infection, *Heliothis zea* 9134.
- pest resistance, effects on growth, development, *Heliothis virescens* 6191.
- pest resistance, extracts effects on development, *Earias vitella* 6146.
- pests, population growth, *Sylepta derogata* 9282.
- pests, predators, nontarget organisms, insecticides toxicity, *Heliothis* 8172.
- threshold limits, chemical control, insecticides, cypermethrin, *Heliothis armigera*, *Diparopsis castanea*, *Earias* 5389.
- volatiles, attractants, parasites, *Eucelatoria* 4321.
- yield, damage, pests infestation effects on, *Heliothis* 8582.
- yield, damage, pests infestation, *Heliothis zea* 8526.
- yield, infestation effects on, *Tetranychus arabis* 6961.
- Gossypium arboreum**, damage, feeding behavior, larvae, *Heliothis zea*, USA, New Mexico 483.
- host plants, pest resistance, *Earias*, *Pectinophora gossypiella* 8441.
- Gossypium barbadense**, crop fields, infestation, effects on crop yield, *Pectinophora gossypiella* 3765.
- Gossypium hirsutum**, crop fields, infestation, effects on crop yield, *Pectinophora gossypiella* 3765.
- host plants, larvae feeding behavior effects on, *Heliothis virescens* 721.
- host plants, pest resistance, *Heliothis virescens* 9352.
- host plants pest resistance, infestation methodology, *Heliothis virescens* 8868.
- host plants, pests, control programs, biological control, chemical control, *Earias*, *Pectinophora gossypiella* 1444.
- pest control, chemical control, fenvalerate, *Insecta* 5326.
- physical properties, host plants, effects on mortality, *Anthonomus grandis* 6115.
- Gossypium atractans**, efficacy, pest control, *Pectinophora gossypiella* 1476.
- Gossypium**, fertilizer application effects on, abundance, pests, *Earias insulana*, *Pectinophora gossypiella* 6973.
- Gracillariidae**, larvae, survival, isolation, plant hosts, *Quercus* 2135.
- Gradients**, altitude, community composition, *Araneae*, Norway 4477.
- Grain**, development, fecundity, *Zea mays*, *Sitotroga cerealella* 6102.
- development, larvae, *Zea mays*, *Rhyzopertha dominica* 5946.
- pests, population growth, *Heliothis armigera*, *Zea mays*, *Sorghum bicolor* 5329.
- population growth, stored products pests, *Sitophilus zeamais*, *Tribolium castaneum* 5344.
- Grains**, effects on development, population growth, *Sitophilus zeamais*, *Tribolium castaneum* 9048.
- stored products, pest control, *Insecta*, Malawi 6968.
- stored products, *Triticum*, survival, fecundity, *Sitophilus oryzae* 6977.
- Gram-negative bacteria**, antibacterial agents, immunity, *Galleria mellonella*, *Hyalophora cecropia* 1818.
- pathogenicity, *Galleria mellonella* 5724.
- Gramineae**, deterrents, acids, biochemical analysis, infestation, *Schizaphis graminum* 532.
- host plants, association, pests, *Anthergona*, *Acriciochaeta*, India 4557.
- Graminella sonorensis**, disease transmission, vectors, sorghum stunt mosaic virus 7659.
- Grammodes solidus**, new species, new records, geographical distribution, Sweden 4723.
- Grammoplectrus spinolae**, new records, geographical distribution, Sweden 4726.
- Granulosis virus**, biochemical characteristics, pathogens, biological control, *Pieris brassicae*, *Pieris rapae* 1468.
- biological control, *Insecta* 3426.
- biological control, *Laspeyresia pomonella* damage *Malus pumila* 8440.
- biological control, reviews, *Insecta* 4505.
- biological control, safety regulations, *Insecta* 3708.
- disease resistance, genetics, *Phthorimaea operculella* 6239.
- effects on development, feeding, biological control, *Pieris rapae* 2942.
- infection, characterization, *Pseudaletia unipuncta*, *Spodoptera exigua* 1028.
- infection effects on survival, parasitoids, *Pieris rapae*, *Apanteles glomeratus* 4190.
- infection, *Pierallia ricini*, Larvae, body weight, pathology 1805.
- infection, seasonal variations, *Spodoptera frugiperda*, USA, Louisiana 5751.
- larvae mortality, pathology, *Cydia nigricana*, *Cydia pomonella* 272.
- Laspeyresia pomonella*, infectivity, pest control, *Rhynchosia frustana* 9332.
- pathogenicity, *Noctuidae* 5752.
- pathogens, surveys, *Choristoneura conflictana*, Canada, Ontario, Canada, British Columbia 4196.
- pathology, larvae mortality, *Pieris brassicae*, *Pieris rapae* 270.
- replication, biological control, *Insecta* 3394.
- Grapholpha c-nigrum**, phenology, life cycle, USSR, Azerbaijan 9109.
- Grapharctas surindecus**, new species, taxonomy, morphology, collections 7242.
- Graphium sarpedon**, chromosomes, bands 3891.
- chromosomes, microtubules, localization 3079.
- Graphoderus manihottensis**, morphology, females 7278.
- Graphognathus leucoloma**, new records, parasitism, *Heterorhabditis*, Australia 2902.
- pest resistance, crop fields, *Leguminosae*, New Zealand, North I. 9307.
- pests, crops damage, *Leguminosae*, New Zealand, North I. 5415.
- population density, estimation, spatial distribution effects on 606.
- Grapholita deliniana**, new records, geographical distribution, North America 9491.
- Grapholita molesta**, pests, population dynamics, orchards, *Prunus persica*, Brazil 6034.
- Grapholita molesta**, communication disruption, synthetic sex pheromone effects on 415.
- flight, sex pheromone, chemotaxis, visual stimuli 5843.
- males, pheromones, behavior response, threshold limits 420.
- methodology, sex pheromone, pheromone traps 57.
- pest control, pheromone traps, fruit trees 2992.
- sex pheromone, biochemical analysis, males, hairpins 3349.
- trapping, sex lures, Japan 5334.
- Grapphia mutans**, synonymy, taxonomy, *Manestra passa* 3224.
- Grasses**, habitat preference, *hibernacula*, *Panicum coloratum*, *Eragrostis curvula*, *Hippodamia convergens* 7625.
- seasonal variations, sex ratio, abundance, leaf blotch, *Agromyza frontella*, USA, Pennsylvania 605.
- Grasslands**, association, species composition, species diversity, *Auchenorrhyncha*, German Dem. Rep., Leura Valley 7584.
- biomass, diurnal variations, *Orthoptera*, USSR 9198.
- colonies, population studies, *Myrmica sabuleti*, *Myrmica scabrinodis*, British Isles, England 8587.
- community composition, effects on, *Acrididae*, USSR, Kazakhstan 589.
- environmental effects, grazing, weather, population decline, *Tabanus similis*, *Chrysops aestuans*, USA, South Dakota 4474.
- habitat, population density, *Hemileuca oliviae*, USA, New Mexico 8374.
- habitat selection, vegetation patterns, *Orthoptera*, USA, Texas 6853.
- historical ecology, ploughing, ant hills size, *Lasius flavus* 569.
- larvae, activity patterns, movements, *Hemileuca oliviae*, USA, New Mexico 3653.
- management, effects on abundance, *Auchenorrhyncha* 5245.
- management, effects on community composition, abundance, *Arthropoda* 5234.
- parasitoids, ecological distribution, abundance, *Aphidius*, British Isles 8393.
- sampling methodology, *Arthropoda* 5617.
- surveys, entomofauna, species composition, species diversity, Austria 8669.
- vegetation patterns, larvae feeding behavior effects on, *Hyles lineata* 543.
- Gravidity**, environmental factors, pupation, site selection, population studies, *Drosophila nigrosipracula*, *Drosophila mettleri* 8375.
- perception, neurophysiology, *Calliphora erythrocephala* 7299.
- receptors, sensilla, *Arenivaga* 2538.
- sensitivity, neurons, orientation, *Gryllus* 895.
- Grazing**, cattle, environmental effects, population decline, *Tabanus similis*, *Chrysops aestuans*, USA, South Dakota 4474.
- defoliation, agricultural practices, biological control, *Inopus rubricreps*, Australia 729.
- defoliation, *Anticarsa gemmatilis*, effects on, *Glycine max* 2003.
- effects on abundance, pests, *Schizaphis graminum*, USA, Oklahoma 6922.
- effects on, population levels, coprophilus fungi, *Lycoriella mali* 4479.
- environmental impact, nutrient release, respiration, fungi, *Onychium subtenus* 2796.
- grasslands, effects on community composition, abundance, *Arthropoda* 5234.
- hivorebrates, effects on, *Rumex crispus*, *Gastrophysa viridula* 4408.
- larvae, leaves, *Lepidoptera*, *Glycine max* 1257.
- pests feeding, effects on cattle, *Musca autumnalis* 8568.
- rangeplants, eggs persistence, *Hemileuca oliviae*, USA, New Mexico, Lincoln Co. 8575.
- semiarid environments, *Macrotermes michaelseni*, Kenya 2004.
- Tydeidae*, fungi 2132.
- Greece**, gynandromorphism, occurrence, *Sergentomyia minuta*, *Sergentomyia dentata* 8882.
- new records, geographical distribution, *Phragmocystis albida*, *Hepialus adriaticus* 4731.
- new records, geographical distribution, *Zygaena ephialtes* 4732.
- new species, new genera, taxonomy, morphology, *Orbitaria* 7142.
- new species, taxonomy, morphology, *Caecilius arundinis*, *Lachesilla dimorpha*.

Greece, (continued)

- Mesoporus gratus 8003.
new species, taxonomy, morphology, *Laemostenus peloponnesiacus*, *Laemostenus thessalicus* 4814
pest control, biological control, parasites, *Prospaltella permiciosa*.
Quadrastiphus permiciosa 256.
stored products pests, abundance, Pyralidae, Gelechiidae 7663.
surveys, species composition, Lepidoptera 6319.

Greece Coast,

- species composition, surveys, Lepidoptera 6316.
Greece, Crete,
pests, spatial distribution, host plants, microclimate, population levels.
Aonidiella auranti 1256.

Greece, Rhodes,

- occurrence, Insecta 9471.
Greenhouses,
pest control, biological control, parasites, *Trialeurodes vaporariorum*, *Encarsia formosa*, Japan 7789.
pest control, predators, *Anthocoris nemorum*, *Trialeurodes vaporariorum* 7708.

Greenland,

- wings, fossils, morphology, Cretaceous period, *Phasma* 4752.

Gregarina hylobii,

- parasites, life cycle, infection, malpighian tubules, *Hylobius abietis* 5726.

Grenada,

- community composition, species diversity, abundance, Arthropoda 7583.

Gretchena,

- synonymy, *Gwendolina* 7993.

Gretchena tibetana,

- new species, taxonomy, morphology, USA, California 7993.

Gripopterygidae,

- taxonomy, morphology, new species, Australia 5609.

Grisolia radicans,

- pest outbreaks, abundance, life cycle, USA, Idaho 9305.

- pest outbreaks, species composition, life cycle, USA, Idaho 5889.

Gromphodolaelaps schaeferi,

- symbionts, effects on elimination, radioisotopes, chromium, strontium.

- Gromphadorhina portentosus* 8108.

Gromphadorhina chopardi,

- sound production, auditory communication 8270.

Gromphadorhina portentosus,

- elimination, assimilation, radioisotopes, chromium, strontium, symbionts effects on, *Gromphodolaelaps schaeferi* 8108.

Group selection,

- population genetics, evolution, *Tribolium confusum* 9426.

Grupa,

- feeding, dosage methodology, *Apis mellifera* 66.

- sex pheromone, effects on attractancy, males, *Acanthoscelides obtectus* 3544.

Growth,

- age, blood meals, *Amblyomma americanum* 4508.

- agrochemicals, DIMBOA, effects on, *Ostrinia nubilalis* 6100.

- air pollution effects on, sulfur dioxide, *Epilachna varivestis* 2153.

- amino acid pools, glycogen, lipids, larvae, *Callosobruchus chinensis* 2712.

- amino acids, nutrition, larvae, *Bombyx mori* 2709.

- antifeedants, fungicides, *Spodoptera mauritia* 8975.

- body weight, host-parasite interactions, *Galleria mellonella*, *Gonia cinerascens* 2825.

- cell lines, media (culture), TC-199-MK, Insecta 8852.

- cells, competition, wing discs, *Drosophila* 3468.

- cell, eye disc, larvae, *Drosophila melanogaster* 3292.

- coexistence, *Ephemera*, USA, Pennsylvania, White Clay Creek 5430.

- cuticle, age, *Drosophila melanogaster*, *Drosophila pseudoobscura* 8018.

- cuticle, synchronization, molting rhythms, *Blaberus fuscus* 8899.

- damage, feeding, *Carya ilinoensis*, *Moelipotus nigropunctata*, *Monella*

- carystella*, *Melanocallis caryaeifoliae* 4587.

- development, carvone effects on, diets, *Spodoptera littoralis* 8231.

- development, diets effects on, yeasts, *Dacus cucurbitae* 7447.

- development, food plants effects on, *Diarsia obliqua* 7734.

- development, hosts, pathogens effects on, *Farnocytus triboli*, *Tribolium*

- castaneum* 1027.

- development, life cycle, *Odontocercus albicornis*, British Isles, England 4660.

- development, morphology, nymphs, *Dialeurodes dissimilis* 7432.

- development, omnivadia, compound eyes, *Blattella* 141.

- development, pests, food plants effects on, *Callosobruchus maculatus* 7737.

- development, pests, *Lens culinaris* flour effects on, *Callosobruchus maculatus*

- 7772.

- development, temperature effects, *Derestes maculatus* 1871.

- development, *Vigna mungo* flour effects on, *Callosobruchus chinensis* 7763.

- diapause, age effects, *Trogoderma granarium* 1855.

- diets effects on, cholesterol chemical composition, *Bombyx mori* 2690.

- diets effects on, *Isotoma viridis* 4268.

- diets, pest control, processed foods, *Tribolium confusum* 8078.

- DNA biosynthesis, polyploidization, fat body, *Schistocerca gregaria* 7832.

- effects on, diets, isomers fatty acids, *Plodia interpunctella* 378.

- effects on, mycetoxins, diets protein composition, *Tenebrio molitor* 1113.

- fecundity, survival, *Acyrtosiphon kondoi*, *Medicago sativa* 6944.

- feeding, food plants, *Spodoptera littoralis*, Ghana 2849.

- feeding, streams, *Ephemera danica*, *Siphonurus aestuarii*, Sweden 3055.

- feeding, temperature effects on, *Coelotes atropis* 5715.

- feeding, temperature, predation, mathematical models, *Adalia bipunctata* 6018.

- helicities, blood meals, *Stomoxys calcitrans* 9051.

- food availability, effects on, *Ctenognathus resolutum* 7808.

- food consumption, social environment effects on, *Acheta domestica* 8275.

- food organisms, *Drosophila*, *Humbertella similis* 7434.

- food organisms effects on, cultivars, *Phthorimaea operculella*, *Solanum tuberosum*

- 539.

- food organisms nutritive value effects on, *Myzus persicae*, *Aphidoletes aphidimyza*

- 5678.

- food plants, effects on, *Sitotroga cerealella* 379.

- food plants, food preferences, *Callosobruchus chinensis* 7433.

- head capsules, morphology, food plants, *Spodoptera litura* 7468.

- host plants, defoliation, pests, *Dalania integrissima*, *Juglans nigra*, USA,

- Illinois 7725.

- host plants effects on, pest resistance, *Heliothis virescens*, *Gossypium* 6191.

- host plants fatty acids effects on, *Pectinophora gossypiella*, *Heliothis zea*,

- Heliothis virescens* 4414.

- host plants, feeding effects on, *Monella carystella*, *Carya pecan* 2091.

Growth, (continued)

- host plants, furanocoumarins, xanthotoxin, Umbelliferae, *Papilio polyxenes* 5968.

- host plants, infestation effects on, *Eryophyes medicaginis*, *Medicago sativa* 2854.

- host plants, infestation effects on, *Tetranychus urticae*, *Fragaria vesca* 6163.

- host plants, infestation, nymphs, *Megacrida*, *Malus* 6126.

- host plants leaves phenology effects on, *Heliconiaceae*, *Hispinea* 615.

- host plants, *Oryza sativa*, biotypes effects on, *Nilaparvata lugens* 1288.

- host plants pest resistance, genotypes, *Zea mays*, *Spodoptera eridania* 8518.

- host-parasite interactions, diets, *Aedes aegypti*, *Brugia pahangi* 289.

- hosts, juvenile hormones, host-parasite interactions, *Galleria mellonella*, *Gonia*

- cinerascens* 2826.

- index, diets, cascin, cholesterol, glucose, larvae, *Corcyra cephalonica* 7467.

- infestation effects on, weed control, *Aceria chondrillae*, *Chondrilla juncea* 9278.

- infestation, pests, effects on plants, *Forcipata* *clata*, *Festuca arundinacea* 2087.

- inhibition, larvae, insecticides, *Spodoptera frugiperda* 3445.

- juvenile hormone, corpora allata, larvae, pupae, *Diarsia obliqua* 7475.

- juvenile hormones effects on, *Galleria mellonella* 6764.

- juvenile hormones effects on, hosts, *Galleria mellonella*, *Gonia cinerascens* 6764.

- larvae, *Aethengona soccata* 4563.

- larvae, development markers, juvenile hormones, enzymatic activity, *Trichoplusia*

- ni* 2723.

- larvae, diets effects on, rutin, *Acheta domestica* 3484.

- larvae, Entomoscissus, *Acanthoscelides obtectus*, *Brassica napus* 2076.

- larvae, food quality effects on, *Hydropsyche* 396.

- larvae, food sources, competition effects on, *Musca autumnalis* 1274.

- larvae, host plants, chemical composition, *Aedes triseriatus* 6818.

- larvae, host plants pest resistance, *Spodoptera frugiperda*, *Eremochola*

- ophuroides* 8539.

- larvae, morphogenesis, cuticle, *Manduca sexta* 3518.

- larvae, pathogens effects on, *Spiroplasma*, *Galleria mellonella* 2648.

- larvae, proadipin, *Papilio polyxene* 6735.

- larvae, survival, pest resistance, host plants, *Btina* 6902.

- life cycle, streams, *Philopotamus montanus*, British Isles, Lake District 2794.

- mass rearing, environmental conditions, *Antheraea yamamai* 9313.

- metamorphosis, amino acids, lipids, *Callosobruchus chinensis* 5072.

- microvilli, malpighian tubules, 5-hydroxytryptamine effects on, *Rhodnius*

- prolixus* 162.

- models, clones, wings, epithelium, *Drosophila* 97.

- mycelia, composts, pests population growth, mushrooms cultivation, *Lycoriella*

- mal* 6172.

- neurons, sensors, central nervous system, reviews, Insecta 3471.

- nuclear polyhedrosis virus, larvae, *Manestria brassicae* 4618.

- nymphs, *Ephemeroptera*, Sweden, Ricklefs R. 3850.

- nymphs, ethylene effects on, *Melanoplus sanguinipes* 4264.

- ovary, inhibition, ethionine, *Agria hovei* 3319.

- pathogens, cascin, trehalose effects on, *Nomuraea rileyi*, *Noctuidae* 1812.

- pathogens, pesticides effects on, *Beauveria bassiana*, *Leptinotarsa decemlineata*

- 6152.

- phenol effects on, *Lycopersicon esculentum* foliage, *Heliothis zea* 5793.

- potassium iodide ingestion, *Bombyx mori* 6649.

- proadipin, life cycle, *Ephemeroptera* 7012.

- pupae, muscles, enzymatic activity, *Calliphoridae* 2718.

- regeneration, physiology, *Periplaneta americana* 5073.

- reproduction, temperature effects, *Lobesia botrana* 352.

- respiratory organs, juvenile hormones effects on, *Danaus plexippus* 4275.

- respiratory organs, head capsules, larvae, *Aedes aegypti* 345.

- retardation, host plants extracts, *Lycopersicon esculentum*, *Heliothis zea* 2083.

- retina, neurons, *Blattella* 988.

- salinity effects on, pathogens, *Leguminosae giganteum*, *Aedes taeniorhynchus* 6606.

- salivary gland, histology, mitochondria, ATP levels, *Chironomus tentans* 4952.

- seedlings, parasite resistance, effects on, *Medicago sativa*, *Acyrtosiphon*

- kondoi*, *Thaenopsis trifoli* 549.

- seeds, *Gastrophysa viridula* predation, *Rumex crispus*, *Rumex obtusifolius* 6784.

- silviculture effects on, diseases resistance, *Pinus strobus*, *Curlculionidae* 1393.

- sterility, antibiotics effects on, *Heliothis subflexa* *Heliothis virescens*

- 3501.

- strains, geographical distribution, temperature effects, *Simulium decorum*, USA

- 2793.

- survival, reproduction, host plants, *Rhopalosiphum padi*, *Prunus* *sp.* 2838.

- survival, substrate preferences, larvae, *Xylotenus pallens* 2701.

- temperature effects on, *Tritanona sordida* 9082.

- temperature, host plants, *Cynodon dactylon*, effects on, *Spodoptera frugiperda*

- 556.

- yield, pests infestation effects on, *Empoasca lybica*, *Solanum melongena* 8485.

- Growth inhibitors,**

- plant extracts, coumarin, eupoinin, *Eupatorium japonicum*, *Drosophila melanogaster*

- 6621.

- Growth stages,**

- developmental stages, morphogenesis, *Pectinophora scutiger* 3464.

- food conversion, host plants, *Hyalophora ecorpi* 5970.

- host plants, predators effects on, *Myzus persicae* 2071.

- survival, population studies, mimicry, *Lepidoptera* 7611.

- Growth rates,**

- population levels, age composition, temperature effects, *Glossina* 1307.

- Growth regulators,**

- alcohol, diurnal, effects on development, sex ratio, *Culex pipiens* 1042.

- antialtiprotein precocene 2(P2), fumigation, effects on embryogenesis, *Dermaconter*

- variabilis* 9344.

- azadirachtin, effects on, oogenesis, ovary biosynthesis, *Locusta migratoria* 377.

- bait, attractancy, pest control, *Camponotus pennsylvanicus* 8969.

- BA, SIR 8514, effects on immature stages, sterility, adults, *Musca domestica*

- 8237.

- CGA-28772, chemical control, pests, stored products 9331.

- CGA-28772, pests, stored products, *Plodia interpunctella*, *Ephestia cautella*,

- Sitotroga cerealella*, *Oryzaephilus surinamensis*, *Tribolium confusum* 6103.

- chemical control, pests, bioaccumulation, methoprene, cattle, *Haematobia irritans*

- 4520.

- competition, intraspecific relationships, food, larvae, *Aedes aegypti* 3618.

- control programs, stored products pest control, *Coleoptera* 3787.

- darnidazole, host plants, pest control, population density, *Pyralis glaucata* 688.

- development disruption, chemical control, bis (thiocarbamate) R-31026, juvenoid

- R-20458, *Tribolium confusum*, *Tribolium castaneum* 6130.

- diflubenzuron, DNA biosynthesis inhibition, diflubenzuron, *Stomoxys calcitrans*

- 1043.

- diflubenzuron, toxicity, chemical control, *Spodoptera mauritia* 3034.

- effects on, reproduction, morphometry, females, *Culex pipiens* 360.

Growth regulators, (continued)

- effects on reproduction, pest control, *Pissodes strobi* 3791.
effects on survival, sterility, *Spodoptera littoralis* 1837
EL-494, metabolism, *Lymantria dispar*, *Glycine* max 4999
fluorescence, metabolites, cytochrome P-450, microsomes, *Musca domestica* 5693
hydroperene, diapause, effects on development, *Hypera postica* 1873
M476, toxicity, brackishwater environment, *Aedes sollicitans*, *Culex salinarius* 6618
pest control, interference, endocrine system, juvenile hormones, *Insecta* 8447
pest control, urea, Bay SIR-8514, *Tanytarsus*, *Chironomus*, *Procladius* 4601
precocene II, sensitivity, development, ovary, *Pyrrhoxenus opertus* 8225
residual effects, pests, stored products, *Rhyzopertha dominica*, *Sitophilus oryzae* 8572
RO 13-5223, effects on development, *Chrysomphalus aonidum*, *Aonidiella aurantii*,
Saissetia oleae, *Ceroplastes floridensis* 6642
saliva, *Brachystola magna*; effects on: *Botuleiura gracilis* 2058
susceptibility, developmental stages, pest control, *Choristoneura occidentalis* 9321
synthesis, *Insecta* 8940
toxicity, effects on development, *Aedes aegypti*, *Rhodnius prolixus* 9054
UC-62644, chemical control, efficacy, *Choristoneura fumiferana* 6959
urea, pest control, golf courses ponds, *Tanytarsus*, *Chironomus*, *Procladius* 8546
- Gryllidae**,
auditory communication, calling behavior 4309
ear, auditory perception, mechanical properties, tympanum, acoustic trachea 4977
metathoracic fast extensor ubiae motor neurons, structure, comparison, *Acrinidae* 8909
pest control, pathogens, baiting 1398
rearing methodology 5632
- Gryllobates** *sigillatus*,
oviposition, egg production, mating stimuli 9049
- Gryllobompha** *dalmatiana*,
new records, geographical distribution, Switzerland 9465
- Gryllopsila**,
pest outbreaks, India, Meghalaya 7694
- Gryllotalpa** *africana*,
digestive tract, enzymatic activity, amylase, sex differences 2547.
- Gryllus**,
chemical composition, fatty acids, genital tract 198.
orientation, neurons, gravity sensitivity 895
Gryllus bimaculatus,
auditory perception neurons, brain, morphology 129.
auditory perception, neurons, morphology, neurophysiology 4960
ecdysteroids levels, adults 8093.
maxillary palps, morphology, movements, feeding behavior, exploratory behavior 8655.
orientation, auditory stimuli 5863
sensilla: maxillary palps, ultrastructure 3294
- Gryllus campestris**,
acoustic responses, stridulation frequency, neurons, cerci, song 4972.
diapause, effects on biochemical composition 1099.
visual perception, antennae tracking 2534
- Gryllus domesticus**,
sense organs, appendages, abdomen 803
- Gryllus integer**,
social behavior, aggregation, phonotaxis, song 7499
- Gryllus pennsylvanicus**,
predators, pests biological control, *Hypera postica*, *Sitona hispidula* 612.
- Gryllus veitii**,
food organisms, nest provisioning, overwintering, *Liris argentata* 3623.
social behavior, aggregation, phonotaxis, song 7499.
- Gryon**,
parasitoids, pests, *Clavigralla tomentosicollis*, Africa 2814.
- Guaedoupe**,
pests, population dynamics, *Spodoptera frugiperda*, *Heliothis zea* 6870.
- Guaiana virus**,
isolation, *Culicidae*, Surinam 3427
- Guanine**,
amino acid biosynthesis, *Dermacentor andersoni*, *Argas arboreus* 8954.
- Guanylate cyclase**,
enzymatic activity, fat body, development, *Bombyx mori* 3509.
- Guanynucleotides**,
adenylate cyclase, monoamine, nervous system, *Schistocerca gregaria* 6526.
- Guatemala**,
biological control, onchocerciasis vectors, pathogenic bacteria, *Bacillus thuringiensis*, *Simulium ochraceum* 626.
new species, taxonomy, morphology, *Trepobates carri* 5578.
new species, taxonomy, morphology, 11 species, *Seydmaniden* 7936.
seasonal variations, diurnal variations, biting behavior, *Simulium* 659.
Simulium patzcuicensis, taxonomy, new species, morphology, larvae, pupae 1631.
- Guatemala, Laguna Chichol L.**,
parasitology, *Arrenurus valencius* 503.
- Guatubesia clareae**,
new species, new genera, taxonomy, morphology, Brazil, Sao Paulo 6353.
- Guianella nematocera**,
new species, taxonomy, morphology, Panama 4858.
- Guianella pilosa**,
new species, taxonomy, morphology, Panama 4858.
- Guianella trimaculata**,
new species, taxonomy, morphology, Panama 4858.
- Guianella tuberculifrons**,
new species, taxonomy, morphology, Panama 4858.
- Guisguota**,
taxonomy, synonymy, genera, *Hydroglyphus* 2396.
taxonomy, synonymy, *Hydroglyphus* 4796.
- Guilds**,
herbivores, population-environment relations, population density, species diversity, leafminers, *Insecta* 3632.
plant communities, myrmecophily, USA, West Virginia 2837.
predation, webs, habitat preferences, *Araneae* 1959.
resource utilization, coexistence, dung, *Aphodius* 9211.
- Gulaea**,
morphology, genitalia, geographical variations, reproductive isolation, Males, *Drosophila teissieri*, Rhodesia 1552.
- Gulaea-plga**,
erythema skin lesions, parasites infestation, *Ixodes danumini* 8428.

Gulaea-plga, (continued)

- infestation, immunity, *Amblyomma americanum*, *Rhipicephalus sanguineus* 6883.
pathogenicity, *Rickettsia*, experimental infection, *Ornithodoros moubata* 9234
pest resistance, infestation, survival, larvae, *Dermacentor andersoni* 5272.
Rickettsia tsutsugamushi infection, spotted fevers, transmission 9233.
- Gumaga nigricula**,
agecomposition, environmental degradation, recovery, water springs, USA, California 7812.
- Guntheria buelowi**,
Acari, new species description, Papua New Guinea 6.
- Guntheria chinagae**,
new species, taxonomy, morphology, Papua New Guinea 6339.
- Guntheria heteroseiosa**,
new species, taxonomy, morphology, Papua New Guinea 6339.
- Guntheria pectinata**,
Acari, new species description, Papua New Guinea 6.
- Guntheria sabinae**,
Acari, new species description, Papua New Guinea 6.
- Guntheria sylogisma**,
new species, taxonomy, morphology, Papua New Guinea 6339.
- Gustatory stimuli**,
chemoreception, orientation, host plants, *Dendroctonus ponderosae* 4303.
discrimination, sugars, amino acids, allelochemicals, *Lygus lineolaris* 5163.
urea, sugars, food preferences, *Camponotus compressus* 8301.
- Gut**,
activity, feeding effects on, hemolysin, *Stomoxys calcitrans* 178.
antibiotics, nikkomycin, *Epilachna varivestis* 5713.
contraction rhythms, larvae, *Bombyx mori* 2549.
disposition, methoxetate, toxicity, *Bracon hebetor* 8198.
dissection, methodology, *Glossinidae* 4080.
enzymatic activity, digestive enzymes, *Haematobia irritans* 185.
epithelium, histopathology, pathogens effects on, *Pieris rapae*, *Lymantria dispar*,
Ephestia cautella 7382.
indole-3-acetic acid metabolism, *Heteroptera* 3311.
microflora, aerobes, mutualism, bacteria, *Orthoporus ornatus*, *Comanclus* 8308.
microflora, fungi, *Myriapoda* 8306.
microflora, putrescine biosynthesis, hemolymph 5684.
microflora, yeasts, diets, feeding behavior, *Drosophila* 5917.
parasites attachment, *Herpetomonas amplexiphala*, *Drosophila melanogaster* 3408.
temperature effects on infectivity, *Anaplasma marginale*, *Dermacentor andersoni* 8137.
ultrastructure, antibiotics, nikkomycin, effects on osmoregulation, *Epilachna varivestis* 4175.
uric acid recycling, symbiosis, bacteria, *Reticulitermes flavipes* 3574.
water uptake, characterization, localization, *Schistocerca gregaria* 232.
- Gutierrezia microcephala**,
seedlings survival, herbivores effects on, *Hesperotettix viridis* 7556.
- Gutierrezia sarothrae**,
ecological distribution, environmental impact, herbivores, *Hesperotettix viridis*, USA, New Mexico 2063.
- Guyana**,
leishmaniasis, disease transmission, epidemiology, *Lutzomyia umbratilis* 9237.
new records, *Planococcus lilacinus* 1580
- Guyana, Lethem, Burru R.**,
pest control, larvicides, Abate, larvae, *Simulium incrustatum* 690.
- Gwendolina**,
synonymy, *Gretchena* 7993.
- Gymnusa cambelli**,
morphology, taxonomy 3181.
- Gymnusa kooopackii**,
morphology, taxonomy 3181.
- Gynaephora rossii**,
thermoregulatory behavior, orientation, sunlight 5906.
- Gyaendrobrotica variabilis**,
disease transmission, vectors, bean curly dwarf mosaic virus, Costa Rica 7658.
- Gyaendromorphism**,
morphology, *Extatosoma tiaratum* 7054.
morphology, sex chromosomes, *Dermacentor andersoni* 1547.
occurrence, *Sergentomyia minuta*, *Sergentomyia dentata*, Greece 8882.
- Gyaendromorphus**,
morphology, development, *Speryia diana* 8654.
morphology, *Dilophus febrilis* 5648.
temperature-sensitive mutant, sex determination, loci, gene expression, *Drosophila melanogaster* 7824.
- Gynoparae**,
feeding, survival, resource allocation, *Rhopalosiphum padi* 5919.
- Gypona**,
new species, morphology, Bolivia 2440.
32 new species, taxonomy, morphology, South America, Central America 7205.
taxonomic revision, new genera 2444.
- Gypona clausula**,
new species, morphology, Bolivia 2440.
- Gypona colomella**,
new species 2444.
- Gypona colophaga**,
new species, morphology, Bolivia 2440.
- Gypona decorana**,
new species 2444.
- Gypona metalana**,
new species 2444.
- Gypona mocamba**,
new species 2444.
- Gypona platona**,
new species 2444.
- Gypona quadra**,
new species 2444.
- Gypona rubraura**,
new species 2444.
- Gypona rusticana**,
new species, morphology, Bolivia 2440.
- Gypona trepida**,
new species, morphology, Bolivia 2440
- Gypona unduavia**,
new species, morphology, Bolivia 2440.

Subject Index

Gypneta wakanka, new species, morphology, Bolivia 2440.

Gypneta, taxonomy, reviews, Nearctic Region 8812.

Gypneta boqueti, new species, taxonomy, morphology, Panama 4017.

Gypneta chiriquiensis, new species, taxonomy, morphology, Panama 4017.

Gypneta fortunei, new species, taxonomy, morphology, Panama 4017.

Gypneta impeta, new species, taxonomy, morphology, Mexico 4017.

Gypneta lamina, X disease vectors, factors affecting orchards colonization 6173.

Gypnetae, new species, taxonomy, morphology, South America 7984.

Gyrinus pullatus, new records, geographical distribution, Sweden 7102.

Gyrophana jolyoides, new records, geographical distribution, habitat, British Isles, Berkshire 6313.

Gyrophana nana, silk secretion, cocoons, larvae 5016.

Habitat, abundance, community composition, Paracatella 6845.

abundance, distribution, host plants, species diversity, Agromyzidae, Umbelliferae 6789.

abundance, host plants, Mompha nodicolella, British Isles 5882.

abundance, salt marshes, Hemiptera, Homoptera, USA, Florida 5241.

abundance, species composition, Araneidae, Czechoslovakia 5223.

abundance, species composition, Coleoptera, Malaysia 3950.

abundance, species composition, Lepidoptera, British Isles, England, Staffordshire 7887.

abundance, species composition, Lepidoptera, Greece 6319.

activity patterns, Apocera, Rhabdomyidae 5238.

adaptations, reproductive strategy, littoral zone, freshwater environments, Scutella picea 6861.

agricultural land, ecological distribution, Lepidosaphes beckii, New Caledonia 4429.

Apocera exta, Apocera hispida, Apocera haruspex atrifasciata, Apocera pearcei, Rhabdomyidae atitkeni, USA, California 9087.

association, human settlements, Calliphoridae, India, West Bengal 9210.

association, leaf litter, Proteinus longicornis, Sepedophilus doderi, Switzerland 7621.

biogeography, geographical distribution, Euxoa, North America 3933.

bionomics, Hydrochara occulta, Hydrochara soror 8281.

body size, case construction, geographical distribution, freshwater environments, Limnephilidae 7807.

breeding, population density, Culicidae, USSR, Baikal 9220.

breeding, vectors, disease transmission, Rhipicephalus appendiculatus, Africa 3683.

check lists, geographical distribution, Hydropsychoidae, USA 8693.

check lists, geographical distribution, Limnephilidae, USA 8695.

coexistence, girdles, Oncideres pustulata, 19 species, Cerambycidae 5981.

colonization, dispersal, flight activity, Trirhabda virgata, Trirhabda borealis 1360.

comparison, community composition, species diversity, Formicidae, USA, South Carolina 1269.

comparison, ecology, webs, Araneida, Costa Rica 1272.

diets, feeding behavior, gut microflora, yeasts, Drosophila 5917.

dispersal, Nymphaeidae 7594.

distribution, Pseudotsuga menziesii host plants, Cnissia carthageni 4471.

distribution, species composition, Saltatoria, British Isles 6305.

duration, tropical environment, pools, distribution, Polydipidum vanderplanki, Dasyheles thompsoni, Chironomus imicola 6832.

ecological distribution, abundance, Anthocharis cethura catalina, USA, California, Catalina I, 2105.

ecological distribution, Belgium, Araneae 7582.

ecological distribution, Brifidietes, Africa 5520.

ecological distribution, colonies, Phlebotomus lamia, USA, Texas 6986.

ecological distribution, environmental conditions, Agrius amydon, Costa Rica 7598.

ecological distribution, feeding, Titus trivittatus fasciolatus, Brazil 6838.

ecological distribution, life cycle, dunes, Pseudomus porcellionis, France Coast 5982.

ecological distribution, population studies, Aps mellifera, Oman 5216.

ecological distribution, surveys, Lepidoptera, Spain, Huesca Province 3139.

ecological distribution, urban environments, Hyalophora cecropia, USA, Illinois 7597.

ecology, forests, Coleoptera, Sweden, Abisko 4424.

ecology, paraculex mexicana, Mexico, Sonora, Kino Bay 2884.

effect on dispersal, Phloxia 4477.

effects on parasites infestation Ixodidae, Acari, Thcosorus caninus, Australia, New South Wales 6776.

effects on sex ratio, Scymnoides lividigaster, Leptotheca galbula, Australia 2863.

environmental changes, control programs, salt marshes, Culicidae, USA, Georgia, Glynn Co. 1437.

environmental effects, aptery, flight, morphology, Trox 4954.

environmental effects, geographical distribution, community composition, Odonata, Lesser Antilles 1569.

environmental factors, pest control, cattle, Amblyomma americanum 8583.

factors affecting horizontal distribution, Aedes triseriatus 4482.

feces, Liposcelis kudden, Liposcelis corrodens, Liposcelis entomophilus.

Liposcelis rufi, Trogius pulsatronis, Lachesilla pedicularia, Yugoslavia 4436.

feeding behavior, larvae, streams, Pycnoscypha guttifer, Canada, Quebec 6227.

flight activity, new subspecies, Agrius amydon, Costa Rica 7233.

forests, occurrence, Formica rufa, France, Alsace 9466.

geographical distribution, check lists, Rhyacophiliidae, USA 8694.

geographical distribution, Coleoptera, France 9470.

geographical distribution, feeding behavior, Opisthacanthus cayaponis, Brazil 5226.

geographical distribution, Necrophorus petiti, North America 2771.

geographical distribution, Nelima gothica, Lacinus ephippiatus, Mitopus morio, Eire 6311.

Habitat, (continued)

geographical distribution, pollinators, Syrphidae, Denmark 5514.

geographical distribution, species composition, Orthoptera, Scandinavia 6318.

geographical distribution, Staphylinidae 3181.

geographical distribution, Tetigonia viridissima, Tetigonia cantans, German Dem. Rep. 7964.

grasslands, population density, Hemileia olivae, USA, New Mexico 8374.

Helochares lividus, Helochares punctatus, Helochares obscurus, Europe 7170.

host plants, effects on population density, Bombus, Zenobia 3598.

host plants, population dynamics, dunes, Brachymerus spinicollis, Egypt 7591.

host preferences, blood meals, Hemaphysalis punctata, Netherlands, Texel I 4388.

infestation, Muscia eremica, Siphonaphera, New Zealand 8332.

larvae, Aeneus virens 4098.

larvae, Symptetrum maddum, Canada, British Columbia, Riske Creek 6495.

leaf litter, samplers, Chilopoda 2478.

Lepthyphantes, Europe, Alps 7899.

life cycle, Cataglyphis sabulosa 9114.

life cycle, feeding, Necrodes, Necrophorus, British Isles 5909.

life cycle, species composition, Lepidoptera, USA, Nevada, Clark County 5145.

life history, ecological distribution, Spanglerogryus albiventris, USA, Alabama 5139.

life history, Thelinae, USA, West 7513.

mating behavior, mate selection, Eristalinae 8252.

Micridium halidau, Microscydus minimus, Aethia taxicerodes, Gyrophana jolyoides, Platyis minutus, Triplax aenea, British Isles, Berkshire 6313.

morphology, Allocapnia vianandii 6457.

morphology, larvae, Sagra femorata 6483.

nesting behavior, ecological distribution, Mischopus 5991.

nesting behavior, feeding life cycle, Osmia maritima 6851.

nesting behavior, oviposition, Lyroda subita 5845.

nests vs. rano, Anisotremus antiope, Euodinus foramanus, Megachile relativ, Megachile mendica, Megachile inermis 1279.

new records, Carpa natus, Eurycoelus blanchardi 5997.

new records, geographical distribution, Asaphidion flavipes, USA, Connecticut 8696.

niches, association, grasslands, Auchenorrhyncha, German Dem. Rep., Leutra Valley 7584.

occurrence, Lepidoptera, British Isles, Scotland 6705.

occurrence, Vanessa cardui, British Isles 5910.

oviposition, fecundity, Toxothrypanes amboensis, USA, Indiana 5857.

palaeoecology, swamps, Upper Carboniferous, Insecta, USA, Pennsylvania 2376.

parasites, aggregation, larvae, Dermacentor albipictus, Canada, Alberta 9181.

parasites, 33 species, Ixodidae, Ethiopia 1409.

pests, abundance, Phylloreta cruciferae, Phylloreta albionica, Psylliodes punctulata, Canada, Saskatchewan 8482.

pests, Culex salinarius, USA, New Jersey Coast 6054.

pools, streams, coexistence, Dytiscidae, Culicidae, USA, Arizona, Dry Creek 9372.

population studies, Coptopteryx viridis, Coptopteryx argentina, Coptopteryx gayi, Argentina, Buenos Aires 5237.

population studies, Ephemera danica, British Isles, Lambourn R. 7013.

population-environment relations, Culiceta inornata, USA, California 9221.

rearing, larvae, Chrysops, USA, New Hampshire 2903.

resource partitioning, host plants, population ecology, Muellerianella 3633.

resource partitioning, Silphidae, Canada, Ontario 9209.

species composition, abundance, Lepidoptera, USA, Texas, Barton Creek Canyon 7915.

species composition, community structure, Odonata, USA, Ohio, Grand R. 3854.

species composition, geographical distribution, Culicidae, USSR 9460.

species composition, islands, Culicidae, USSR Coast 9489.

species composition, surveys, Saltatoria, British Isles 6301.

sympatric populations, Morpho granadensis polybaptus, Morpho peleides limpida, Costa Rica 6019.

taxonomy, morphology, Monanus, India 7161.

taxonomy, morphology, new species, Automerus louisiana, USA, Louisiana 7228.

tree holes, oviposition, larvae, Hadrobremus scabifrons 3524.

trees, dried holes, colonization, species composition, Insecta 2284.

Trypanosoma cruzi vectors, disease reservoirs, Triatoma arburuicivai, Brazil, Minas Gerais State 5283.

variation, energetics, foraging behavior, predation, Argiope trifasciata, Araneus trifolium 8297.

vectors, leishmaniasis, Psychodopygus intermedius 9223.

vegetation, Potamogeton, colonization, Sparganium, Simulium penobscotensis, USA, Maine, Penobscot R. 755.

water quality, new species, Nimbocera pinderi, USA, Southeast 4845.

Habitat preference, Diplopoda, German Dem. Rep., Thuringia 7588.

humeralia, grasses, Panicum coloratum, Eragrostis curvula, Hippodamia convergens 7625.

Habitat preferences, abundance, Mammalia nests, Collembola 1179.

abundance, Meconura, Czechoslovakia 6872.

acclimation, temperature tolerance, Cryptotermes 1191.

Carabidae, New Zealand, Banks Peninsula 6868.

ecological distribution, Haemaphysalis japonica 9189.

ecological distribution, larvae, Culicidae, USA, Ohio 1951.

food preferences, ecological distribution, association, Drepanotermes, Australia 846.

geographical distribution, Monobia, USA, Texas, Mexico 2369.

geographical distribution, speciation, Spinosodineutes 1563.

habitat selection, Gerns pinguetis, Gerns comus, Gerns buenoi 3867.

host plants, introduced species, Cruciferae, Pieridae 2048.

nest vs. urban environment, walls, Megachilidae, British Isles 1182.

nests, agonistic behavior, Aps mellifera 452.

oviposition, Drosophila nigrospiracula, Drosophila mettleri 406.

oviposition, host plants, Euphybia lybe 6660.

oviposition, host plants, Maruca testulalis, Vigna unguiculata 8349.

oviposition, reproductive behavior, Maruca testulalis 433.

oviposition, soil moisture, Chroton trachypetris 5103.

parasitoids, biological control, Comptosia concinnata, Lymantria dispar 8331.

parasitoids, pest control, Lymantria dispar, Brachymeria lasa, Coccysomus dispers, USA, Connecticut 8466.

phenology, Castanera crocata, Castanera flondana, USA, Florida 1963.

photokinesis, activity patterns, Tribolium castaneum, Tribolium confusum 2787.

population dynamics, life cycle, parasitoids, Anthrax gideon, Anthrax analis 8383.

range, geographical distribution, Phylloreta striolata, Canada, Saskatchewan

Habitat preferences, (continued)

4335.
resting behavior, environmental factors, *Glossina*, Niger, Mozambique 1178
resting behavior, forests, *Glossina palpalis*, Mali 436
resting behavior, *Glossina tachinoides*, Africa, West 9185
seasonal variations, *Carabidae*, *Glycyne max* 1174
swarms, homing behavior, *Apis mellifera caucasicus*, *Apis mellifera carnica* 6991.
temperature, humidity, larvae, *Ixodidae* 1175
webs, predation, guilds, *Araneae* 1959
- Habitat selection,**
breeding sites, *Culiseta melanura*, *Culiseta morsitans*, USA, New York, Toad Harbor Swamp 6875
coevolution, host plants, *Cruciferae*, *Anthocharis cardamines* 8348
community composition, leaves morphology effects on, *Collembolea* 9207
dispersal, *Gerris pingreensis*, *Gerris comatus*, *Gerris buenoi* 3867
ecological distribution, feeding behavior, *Acan*, Netherlands, Maarssenveen I L 5433
feeding behavior, predation, *Notonecta*, British Isles 2904
larvae, polymorphism, USA, Montana, Flathead R, Basin 1714
nesting behavior, *Metapolybia arctica*, Costa Rica 7800
sex differences, larvae, *Thyridopteryx ephemeriformis* 4444
spatial distribution, bogs, sub-polar environments, *Aedes*, Canada, Quebec 6043
streams, nymphs, phenology, *Stenacron interperatatum*, *Stenonema pulchellum* 3052
substrate preferences, fungi, colonial characteristics, *Acromyrmex landolti* *fracticornis* 6221
substrate preferences, nymphs, *Hexagenia bilineata* 3853
vegetation patterns, grasslands, *Orthoptera*, USA, Texas 6853.
water requirements effects on, water balance, *Orchesella cincta*, *Tomocerus minor* 2604
- Habitat utilization,**
diets, host plants, *Scymnoides lividigaster*, *Leptothea galbula*, Australia 6049
food, biomass turnover, *Chorthippus parallelus* 7634
mygaton flooding, *Aedes vexans*, USA, Florida 1389
- Habituation,**
associative learning, mutation, *Drosophila* 8647
landing behavior, visual perception, *Drosophila melanogaster* 1156
odors, nestmates, males, *Lasioglossum zephyrum* 9075
retention, cardiac conditioning, *Calliphora vomitoria* 428.
sex pheromone response, effects on mating behavior, *Pectinophora gossypiella* 426.
- Halictoides perardensis,**
new species, new genera, Hungary 37
- Habropogon capensis,**
new species, taxonomy, morphology, South Africa 4832
- Hadena bicurris,**
aenotaxis, chemical stimuli, flowers 5866
- Hadroctylus,**
taxonomic revision, nomenclature, morphology 4038
- Hadrothemis scabrifrons,**
larvae, oviposition, habitat, tree holes, trees 3524.
- Hadzibeylia physococci,**
new genera, new species, taxonomy, morphology, USSR, Georgia 6440.
- Haemagogus equinus,**
medical importance, vectors, disease transmission, yellow fever virus 1379.
- Haemagogus janthinomys,**
disease reservoirs, Mayaro virus, yellow fever virus, Brazil 625.
- Haemaphysalis,**
experimental infection, Ganjam virus 7385.
- Haemaphysalis aciculifer,**
abundance, surveys, Botswana 3672.
- Haemaphysalis chordeilis,**
ectoparasites, *Pediceptes phasianellus*, Canada, Manitoba 1230.
- Haemaphysalis cooleyi,**
parasites, morphology, identification keys, South Africa 3259.
- Haemaphysalis inermis,**
vectors, tick-borne encephalitis virus, survival, disease transmission, *Micromys minutus* 4491.
- Haemaphysalis intermedia,**
life history, life cycle 447.
- Haemaphysalis japonica,**
population dynamics, ecological distribution 9189
- Haemaphysalis leporispalustris,**
ectoparasites, *Pediceptes phasianellus*, Canada, Manitoba 1230.
infestation, pest resistance, skin sensitization antibodies, *Sylvilagus floridanus* 5276
pathogens, infection, isolation, *Spiroplasma* 4187.
- Haemaphysalis longicornis,**
ectoparasites, control, cattle hybridization 649.
larvae, habitat preferences, temperature, humidity, environmental effects, survival, molting 1175.
- Haemaphysalis punctata,**
abundance, seasonal variations, British Isles, Wales 5263.
nymphs, disease transmission, *Babesia microti* 8418.
vectors, parasites, new records, sheep, *Babesia motasi*, British Isles 4538.
- Haematobia irritans,**
abundance, predator-prey interactions, *Philonthus* 3606.
blood meals, midgut, enzyme activity 5676.
chemical control, insecticides, ear tags, cattle 6131.
chemical control, insecticides, ear tags, cattle 9257.
digestive enzymes, enzymatic activity, gut, salivary gland 185.
digestive enzymes, enzymatic activity, proteolytic enzymes, midgut 2551.
hosts, effects on parasites development, *Muscidifurax raptor*, *Spalangia drosophilae* 2116.
migrations, temperature simulation, laboratories 1684.
pest control, cattle, insecticides efficacy 2172.
pests, chemical control, growth regulators, bioaccumulation, methoprene, cattle 4520.
pests effects on activity patterns, livestock 3688.
- Haematobia irritans exigua,**
pesticide resistance, mortality, pest control, Australia 3430.
- Haematobia irritans irritans,**
development, survival, temperature effects 2692.
economic importance, effects on cattle, reviews, USA 5279.
- Haematobosca stimulans,**
cattle pests, abundance, British Isles, Scotland 736.
- Haematopinus tuberculatus,**
hematophagy, effects on blood, *Bubalis bubalis*, India 5280.

Haematopinus tuberculatus, (continued)

- life cycle, pests, domestic animals 6070.
- Haematopodidae,**
parasites, surveys, *Phthiraptera* 516.
- Haematopota,**
species composition, USSR 9477.
- Haematopota pluvialis,**
cattle pests, abundance, British Isles, Scotland 736.
- Haematopus leucopodus,**
hosts, parasites, surveys, *Phthiraptera* 516.
- Haemogammas nidi,**
parasites, factors affecting distribution, hosts, *Mammalia* 3585.
- Hafia alvei,**
disease transmission, pests, *Costelytra zealandica*, New Zealand, Canterbury 5723.
- Hagenomyia micans,**
life cycle, seasonal variations, Japan 4339.
- Haiti,**
Mansonellosis, disease transmission vectors, *Culicoides furens*, *Culicoides barbosai* 4516.
new records, geographical distribution, *Oxytelus sculptus* 2371.
new species, taxonomy, morphology, *Alathetus haitiensis* 4853.
new species, taxonomy, morphology, *Alathetus haitiensis* 8799.
vectors, parasites, *Mansonella ozzardi*, *Culicoides furens* 656.
- Halacaroides angustus,**
new species, taxonomy, morphology, Chile, Straits of Magellan 7147.
- Halacaroides brevoculuris,**
new species, taxonomy, morphology, Chile, Straits of Magellan 7147.
- Halacarus longior,**
new species, taxonomy, morphology, Atlantic Ocean 6343.
- Halacarus peregrinus,**
new species, taxonomy, morphology, Atlantic Ocean 6343.
- Halacarus triunguis,**
new species, taxonomy, morphology, Atlantic Ocean 6343.
- Halacarsche halicoherti,**
parasites, hosts, *Eumetopias jubatus*, *Phoca vinulina*, *Phoca largha*, USA, Alaska 4385.
- Halictidae,**
anti-predator behavior, soil-dropping behavior, *Tetramorium caespitum* 9119.
communication systems evolution, effects on size distribution 748.
- Halictus,**
Dufour's gland secretions, biochemical analysis, taxonomy 3384.
- Halictus,**
Dufour's gland, secretion, chemical analysis 988.
pollination efficiency 5197.
- Halictus farinosus,**
phoresy, genital tract, *Huntaphelenchoides*, *Acrostichus* 1213.
pollination efficiency 5197.
pollination efficiency, *Allium cepa* 9166.
- Halictus ligatus,**
phoresy, genital tract, *Huntaphelenchoides*, *Acrostichus* 1213.
- Halictus morio,**
habitat preferences, nesting, urban environment, walls, British Isles 1182.
- Halidayina,**
taxonomic revision, morphology 7972.
- Halidayina asymmetrica,**
new species, taxonomy, morphology 7972.
- Halidayina exserta,**
new species, taxonomy, morphology 7972.
- Halipidae,**
surveys, geographical distribution, population decline, autecology, zoogeography, Denmark 5516.
- Halobates acherontis,**
new species, Australia, Northern Territory 3208.
- Halobates flaviventris,**
cadmium, radioisotopes, uptake, bioaccumulation 936.
- Halobates nertis,**
cadmium, radioisotopes, uptake, bioaccumulation 936.
- Halobates robustus,**
anti-predator behavior, avoidance behavior, aggregation 8603.
avoidance behavior, predator-prey interactions, locomotor activity 3651.
- Halocladus,**
karyotypes, phylogeny, taxonomy 2408.
- Halotanytarsus lika,**
taxonomy, morphology 818.
- Halovelina angulana,**
new species, Australia, Northern Territory 3208.
- Halitica caerulea,**
nymphs, β -glucosidase, digestive tract, temperature effects, rhythms 1745.
- Halitinae,**
species composition, activity patterns, seasonal variations, Austria, Innsbruck 6817.
- Halysidota harrisi,**
geographical distribution, range extension, USA, Florida 5533.
- Hamaba,**
morphology, taxonomy, geographical distribution 1601.
- Hamaba bahamensis,**
morphology, geographical distribution 1601.
- Hamaba minima,**
synonymy, *Hamaba bahamensis* 1601.
- Hamamelis virginiana,**
host plants, *Pseudanthrenomus ham*, USA, East 9097.
host plants, pests, abundance, survival, *Pseudanthrenomus hamamelidis* 5969
- Hamsters,**
babesiosis, *Babesia microti*, *Ixodes dammini* disease transmission 8422
- Handling,**
methodology, apiculture 1412.
- Hapilacarus pandanus,**
new species, taxonomy, morphology, Micronesia, Yap I. 3965
new species, taxonomy, morphology, Micronesia, Yap I. 8717
- Haplody,**
evolutionary genetics, sex determination, diploidy, *Hymenoptera* 1550.
genetic variance, diploidy, *Drosophila* 3118
longevity, males, *Melipona quadrifasciata* 9032.
- Hapiopappus squarrosus,**
abundance, recruitment, herbivores effects on, *Insecta*, USA, California 6783

Subject Index

- Haplorthynchites aeneus**, morphology, pupae, larvae 6488.
- Hardwoods**, extracts, effects on survival, antifeedants, *Reticulitermes flavipes* 3808. parasite resistance, effects on parasites, *Bifiditermes besooni* 481. pests, abundance, seasonal variations, *Sesidae*, USA, Mississippi 3786.
- Harknessianus titus**, association, interspecific relationships, Formicidae 7600.
- Harmonia axyridis**, enzymes, α , α -trehalase, isolation, purification 944.
- Harpagophallia**, genitalia, morphology, males 5061.
- Harpalus affinis**, food preferences 4355.
- Harpalus distinguendus**, pests, Triticum, USSR, Ukraine 6919.
- Harpalus laticeps**, forests, fires, environmental change, effects on species composition 6840.
- Harpalus pennsylvanicus**, capture-recapture studies, habitat preferences, population density 1174. predators, pest biological control, *Hypera postica*, *Sitona hispidula* 612.
- Harpalus rufipes**, introduced species, geographical distribution, range, North America 3153.
- Harrisiana brilliana**, pupae, susceptibility, parasitism, *Neoplectana carposcapes* 287.
- Harvesting**, effects on population levels, pest control, Agropyron desertorum, Labops hesperus 8512. nectar, regulation, honey storage, *Apis mellifera* 8593. pupae rearing, methodology, automation, *Diatraea grandiosella* 8024.
- Hastella**, meiosis, karyotypes 3899. morphology, taxonomy, geographical distribution, Australia 2473.
- Hastella calabyi**, new species, morphology, Australia 2473.
- Hastella govensis**, new species, morphology, Australia 2473.
- Hastella koongarra**, new species, morphology, Australia 2473.
- Hastella longirostris**, meiosis, karyotypes 3899. morphology, Australia 2473.
- Hastella obtusipinnis**, meiosis, karyotypes 3899. morphology, Australia 2473.
- Hastella spinipennis**, meiosis, karyotypes 3899. morphology, Australia 2473.
- Hatchability**, accessory gland, ablation, females, *Cochliomyia hominivorax*, *Stomoxys calcitrans* 1853. egg production, methotrexate effects on, toxicity, *Bracon hebetor* 8203. eggs, fecundity, breeding success, *Adoxophyes* 1851. eggs, fecundity, oviposition, *Chilo suppressalis*, Japan 1909. eggs, inbreeding effects on, genetic load, *Lepidoptera* 7877. eggs, Pleistophora dixipi infection, *Diuraphis morosus* 9008. eggs, temperature effects on, *Bombyx* 6052. temperature effects, *Anticarsia gennatus* 1934.
- Hatching**, diapause induction, photoperiods changes, *Acalolepta luxuriosa* 1094. eggs, diel variations, *Atherigona soccata* 4983. eggs, environmental effects, *Pyrrilla perpusilla* 4259. eggs, insecticides effects on, chemical control, *Keiferia lycopersicella* 3755. eggs, oviposition, *Aedes albopictus* 5855. ova, diagnosis, medical importance, *Sarcoptes scabiei* 3668. overwintering eggs, diapause termination, temperature effects on, *Panonychus ulmi* 8214. population dynamics, seasonal variations, sex ratio, *Aedes triseriatus*, USA, Indiana 1266. sequence, sex differences, *Lymantria dispar* 5807. *Simulium nigritarse*, *Simulium adersi* 1483. temperature effects, mathematical models, simulation, *Hypera postica*, Canada, Ontario 2775.
- Hauserophthiracarus**, new species, new genera, taxonomy, morphology, Greece 7142.
- Hawaii**, courtship, mating behavior, population structure, population genetics, *Drosophila primaeva* 1554. morphometry, leg bristles, speciation, *Drosophila silvestris* 6294. new records, new species, taxonomy, *Trichogramma* 8820. occurrence, geographical distribution, introduced species, indigenous species, *Psoocoptera* 7888. occurrence, taxonomy, morphology, keys, *Xyleborini* 7165. population studies, geographical variations, sexual behavior, *Drosophila silvestris* 9067.
- Hay**, breeding sites, substrate specificity, larvae, pupae, *Stomoxys calcitrans* 9071.
- Head**, acetylcholinesterase activity, *Dacus cucurbitae* 7323. body measurements, diets, effects on, larvae, *Bactra verutana* 380. capsules, growth, larvae, *Aedes atropalpus* 345. capsules, growth, morphology, food plants, *Spodoptera litura* 7468. cuticle, light penetration, *Megoura viciae* 2533. development, proteins effects on, embryos, *Smittia* 1085. evolution, morphology, *Rhynchota*, *Psoocoptera*, *Thysanoptera* 3134. fatty acids, workers, age, *Apis mellifera* 8090. functional morphology, larvae, *Lyta vesicatoria* 76. hair, chemoreceptors, ultrastructure, *Locusta migratoria* 6531. morphology, anomaly, teratology, *Tingidae*, *Czechoslovakia* 3256. morphology, *Copris sacculata* 8894. mouthparts, functional morphology, feeding, *Cetonia aurata* 6510. movements, nystagmus, visual evoked response, *Tenebrio molitor* 151. sense organs, larvae, morphology, role, chemotaxis, *Hylemya antiqua* 913.
- Heads**, capsules, ultrastructure, larvae, *Chironomidae* 104.
- Hearing**, receptors, morphology, histology, *Hemideina crassidens* 136. sense organs, structure, *Cystoma saundersii* 139.
- Heart**, edema, case reports, stings, *Buthus* 9256. muscles, cell membranes, ultrastructure, *Lithobus forficatus* 6541.
- Heart rate**, control, neurohormone D, biochemical characteristics, *Peniplaneta americana* 5698. neurohormone D effects on, *Peniplaneta americana* 5674.
- Heat**, avoidance behavior, *Cicindela ocellata rectilata*, USA, Texas 9118. environmental factors, pest control, stored products, *Triticum*, *Stiophilus oryzae* 7662.
- Heat balance**, apiculture, hives, methodology 6969.
- Heat shock**, dephosphorylation, ribosomal protein S6, *Drosophila melanogaster* 7319. effects on chromosomes puffing, *Drosophila melanogaster* 759. effects on chromosomes puffing, salivary gland, *Chironomus tentans* 7828. effects on salivary gland chromosomes, puffing, *Drosophila melanogaster* 2310. gene expression, books, *Drosophila* 9504. genes, activation, transcription, *Drosophila* 1506. genes, gene regulation, *Drosophila* 6246. genes, transcription, role RNA polymerase II, *Drosophila melanogaster* 6274. induction, mRNA, genes, cloning, characterization, *Drosophila melanogaster* 3877. protein biosynthesis, mRNA translation, *Drosophila* 8932. protein biosynthesis, mRNA translation, *Drosophila melanogaster* 5708. protein biosynthesis, polypeptides, histone H2b, characterization, *Drosophila* 7325. proteins, association chromatin, characterization, *Drosophila melanogaster* 4158. proteins, biosynthesis, developmental stages, *Drosophila melanogaster* 5686. proteins, gene expression, cell lines, salivary gland, *Drosophila* 8634. proteins, gene expression, locus 8747 locus, 87C1 locus, mutants, *Drosophila melanogaster* 8645. proteins, DNA nucleotide sequence, *Drosophila melanogaster* 8631. proteins, genes, hybridization, localization, *Drosophila melanogaster* 4672. proteins, induction inhibition, picornavirus, tissue culture, *Drosophila melanogaster* 982. proteins, nucleotide sequence, genes, *Drosophila melanogaster* 8629. proteins, translocation, distribution, Kc cells, *Drosophila* 7838. puffing, chromosomes structure relationship position effects variegation, *Drosophila melanogaster* 7840. ribonucleoproteins, U1 RNA, protein composition, *Drosophila* 8623. stress, ADH genotype, effects on ethanol tolerance, *Drosophila melanogaster* 7859.
- Heat tolerance**, diurnal variations, *Trigonostichus gigas* 6581. exposure, mortality, *Rhyzopertha dominica*, *Stiophilus oryzae*, grasses, Australia 975. temperature effects, immature stages, survival, mortality, *Rhyzopertha dominica* 365. temperature-sensitive, immature stages, *Plodia interpunctella* 363.
- Heat transfer**, thermoregulation, thermoregulatory behavior, functional morphology, *Colias* 6582.
- Heat treatments**, stored products pest control, *Rhyzopertha dominica*, *Stiophilus oryzae* 2251.
- Heats**, burnt ground, feeding behavior, food organisms, *Hepialus juveniles*, *Pyrrhocorax pyrrhocorax* 6827.
- Heating**, hives, methodology, solar radiation, apiculture 2998.
- Heavy metals**, bioaccumulation, mercury, *Basidiomycetes*, larvae, *Diptera* 5129. bioaccumulation, pollution levels, *Oniscus asellus*, British Isles 8186. bioaccumulation, sex differences, rivers, *Dytiscidae*, USSR 5436. cadmium uptake, antimetabolic acid chelation effects on, *Hydropsyche* 6584.
- Hebestola brasiliensis**, new species, taxonomy, morphology, Brazil 6363.
- Hebridae**, classification systems, morphology, taxonomy 4860.
- Hectopylella gracilis**, new species, taxonomy, morphology, Argentina 7241.
- Hedgerows**, species diversity, management effects on, *Arthropoda*, British Isles 7618.
- Heleidomeris vivipara**, parasitism, sex ratio, hosts, *Cuicodes variipennis*, 6024.
- Helianthus**, host plants, pest resistance, *Empoasca abrupta* 2090.
- Helianthus annuus**, crop fields, damage, *Atractomorpha crenulata* 5328. pests, soil distribution, overwintering larvae, *Smicronyx fulvus* 6932. pollen, foraging behavior, energetics, *Apidae* 6735. seeds, infestation, *Neolassioptera helianthi*, larvae, *Fungi* 2074.
- Helianthus annuus**, charcoal rot detection, infestation, *Cylindrocopturus adpersus* 8338. crop fields, pests, damage, *Poecilimon borbonicus*, Turkey 4537. host plants, attractancy, pollination, insects 7762. host plants, host preferences, reviews, *Insecta* 4390. host plants, pest resistance, effects on survival, *Empoasca abrupta* 2090. host plants, pests, spatial distribution, *Smicronyx fulvus* 6091. pests spatial distribution, *Smicronyx fulvus* 9309. pollinators, species composition, *Hymenoptera*, USA, Texas, Lower Rio Grande Valley 9155. yield, pollination, agricultural practices, *Apis mellifera* 3730.
- Helianthus occidentalis**, association, *Tnepolus mesillae*, USA, Illinois 5535.
- Helicobia**, taxonomy, morphology 4940.
- Helicobia borgmeieri**, taxonomy, morphology, aedeagus 4940.
- Helicobia iberti**, taxonomy, morphology, aedeagus 4940.
- Helicobia penai**, taxonomy, morphology, aedeagus 4940.
- Helicobia pilifera**, taxonomy, morphology, aedeagus 4940.

- Helicobia pilipileura**, taxonomy, morphology, aedeagus 4940.
- Helicobia resinata**, taxonomy, morphology, aedeagus 4940.
- Helicobia surrubea**, taxonomy, morphology, aedeagus 4940.
- Heliconia**, entomofauna, community composition, succession, Insecta 5951
parasites, interspecific relationships, competition, Chrysomelidae, Costa Rica 4370
- Heliconia imbricata**, host plants, leaves phenology effects on growth, Hispinae 615.
- Heliconiaceae**, host plants, leaves phenology effects on growth, Hispinae 615
- Heliconiidae**, life history, resource allocation, reproductive strategy 468.
natural enemies, weed control, *Passiflora mollissima*, USA, Hawaii 2947.
- Heliconius charitonius**, spermatophores nutritive value, selection pressure, comparison, *Dryas julia* 773
- Heliconius melponense**, molting, photoperiods effects on, body size 1110
- Helicospiridium parasiticum**, parasites, infection, *Onbates* 5756
- Helicotylenchus dihystrae**, pest control, *Phaseolus vulgaris* 709
- Helicoverpa armigera**, chemical control, pesticide residues, carbaryl, *Cicer arietinum* 7773
diurnal variations, flight activity, feeding behavior 7521
flight, diurnal variations, light, mobility 6693
pest outbreaks, population dynamics, environmental factors, India, Jabalpur 7769.
- Helicoverpa armigera conferta**, insecticides, pest control, New Caledonia 4558.
- Helicoverpa**, chromosomes 2323
predation, parasites biological control, *Taenia saginata*, Kenya 1317
- Heliopeyche**, drift, environmental effects, Australia, A.C.T., Condor Creek 753
- Heliothis**, abundance, crop fields, agricultural practices effects on 3035
baculovirus infection, actinon 2619
biological control, feeding adjuvants, *Bacillus thuringiensis*, *Baculovirus* heliothis 9274
biological control, nuclear polyhedrosis virus, replication, cell lines 3414
contaminants, diets, larvae 735
eggs, parasites, *Trichogramma*, USA, Texas 4383
feeding behavior, host plants, larvae, *Gossypium* 6123
host preferences, predators, parasites, Colombia 555
infestation, crops, damage, economics, *Gossypium* 4612.
mass rearing methodology, hybrids, sterility 3243.
pest control, biological control, parasites, methodology, *Trichogramma* 1448.
pest control, damage, *Gossypium*, Australia, New South Wales 2988
pest control, feeding adjuvants, biological control, *Bacillus thuringiensis*, *Baculovirus* heliothis 4605
pest control, insecticides, USA, Mississippi 693.
pests, infestation, effects on yield, *Gossypium* 8582.
population dynamics, host plants, seasonal variations, USA, Texas 6015.
predators, nontarget organisms, insecticides toxicity 8172.
predators, nontarget organisms, toxicity, chlordimeform, Geocoris, Hippodamia convergens, Nabes, *Chrysopa carnea* 4227
composition, seasonal variations, crop fields, USA, Mississippi 3012.
- Heliothis armiger**, catchability, environmental factors, light traps, Australia, New South Wales 1472.
chemical control, insecticides, crop protection, grasses 728.
chemical control, insecticides, cypermethrin, *Gossypium* 5389.
crops, control, ovicides, methomyl, mortality, eggs, larvae 5380.
eggs, development, temperature effects 1124.
spatial distribution, temporal variations, eggs, oviposition, *Gossypium* 1154
- Heliothis armigera**, activity patterns, diel variations, India 9100.
allitin, pest control, India 7701.
biological control, pathology, *Bacillus thuringiensis* 997.
chemical control, pest control, crop fields, Togo 2987.
development, larvae, pathogens effects on, nuclear polyhedrosis virus, *Bacillus thuringiensis* 7377.
diapause pupae, amino acid composition, hemolymph 2676.
feeding behavior, host plants, larvae, *Gossypium* 6123.
granulosis virus, pathogenicity 5752.
hemolymph amino acids, parasitism effects on, *Camponotus chloridea* 1022.
host parasites, *Eucalatoria armigera*, capture-recapture studies, infestation, establishment, India, Bangalore 2159.
juvenoids effects on oxygen consumption, metabolism 7329.
movements, sound effects on 9081.
nuclear polyhedrosis virus infection, effects on hemolymph proteins 4200.
nuclear polyhedrosis virus, infection susceptibility, *Heliothis* zea, *Spodoptera frugiperda* 5746.
pathogens, morphogenesis, cytoplasmic polyhedrosis virus 3397.
pest control, *Bacillus thuringiensis* 1836.
pest control, chemical control, fenvalerate 5326.
pest control, crop protection, economics, *Gossypium*, Sri Lanka 6110.
pest control, damage, *Gossypium*, Australia, New South Wales 2988.
pest control, insecticides, crop protection, *Gossypium*, Thailand 4622.
pests, population growth, grain, *Zea mays*, *Sorghum bicolor* 5329.
pheromone traps, control programs, pest outbreaks detection 6183.
rearing, diets, larvae, methodology 6475.
- Heliothis peltigera**, occurrence, abundance, breeding, British Isles, England, Sussex 5992.
- Heliothis punctiger**, catchability, environmental factors, light traps, Australia, New South Wales 1472.
chemical control, ovicides, methomyl, mortality, eggs, larvae 5380.
larvae, mortality, nuclear polyhedrosis virus, transmission, predation, *Oecchia schellenbergii* 1029.
migrations, flight activity, radar, Australia, Bass Strait 1264.
pests, biological control, *Trichogramma* Ivelae 1410.
- Heliothis punctiger**, (continued)
pupae diapause, hormones effects on 2679.
- Heliothis punctigera**, feeding behavior, host plants, larvae, *Gossypium* 6123.
sex pheromone, attractancy, olfactory communication 5871.
- Heliothis subflexa**, *Heliothis virescens*, hybrids, diapause, winter survival 1102.
mass rearing methodology, sterility 3243.
pest control, diapause, emergence, pupae, genetics, hybrids 347.
sex pheromone, chemical composition, components attractancy 2585.
- Heliothis subflexa** × **Heliothis virescens**, sterility, antibiotics effects on 3501.
- Heliothis subflexus**, host preferences, parasites, Colombia 555.
- Heliothis tergemina**, host preferences, parasites, Colombia 555.
- Heliothis virescens**, abundance, seasonal variations, crop fields, USA, Mississippi 3012.
biological control, mating behavior disruption, sex pheromone 3763.
cell lines, continuous culture 2512.
chemical control, toxicity, methyl parathion 4635.
comparison, development time, larvae, pupae, sex differences 1089.
development, body weight, diets, larvae, pupae 1750.
diapause, development, ecdysteroids 7437.
egg production, oviposition, age, mating effects on 8213.
eggs, host selection, parasitoids 2815.
eggs, mass rearing 1457.
eggs, predation, crop fields, USA, Texas 6124.
eggs, predators, nectar effects on, *Gossypium* 5971.
eggs, recognition, kairomones, host selection, parasitoids, *Telenomus heliothidis* 5186.
emergence, tillage effects on 2247.
feeding, pathogens, effects on survival, *Bacillus thuringiensis* 8159.
flight activity, temperature effects 1943.
flight, sex pheromone, chemotaxis, visual stimuli 5843.
food consumption, food conversion, pathogenicity, *Nomuraea rileyi* 9006.
growth, development, *Gossypium* host plants effects on 6191.
Heliothis subflexa, hybrids, diapause, winter survival 1102.
host plants, damage, population levels estimation, *Nicotiana tabacum* 8536.
host plants fatty acids effects on growth 4414.
host plants, life cycle, USA, Mississippi 2085.
host preferences, parasites, Colombia 555.
hosts, kairomones, effects on parasitoids oviposition, *Cardiochiles nigricipes* 5176.
hosts, parasitoids, interspecific relationships, competition 2811.
infestation methodology, host plants pest resistance, *Gossypium hirsutum* 8868.
larvae development, parasitoids effects on, *Chelonus insularis* 4379.
larvae, grazing, leaves, *Glycine* max 1257.
larvae, nutrient deficiencies, pyridoxine, vitamins, survival, development 1744.
larvae, predators, surveys 2108.
mass rearing methodology, sterility 3243.
mating behavior, orientation, calling behavior, courtship 1900.
olfactory stimuli, parasites, *Eucalatoria* 4321.
oviposition, site selection, host plants, *Lycopersicon esculentum* 2081.
parasitoids, crop fields, USA, Mississippi 6168.
pathogens, efficacy, *Bacillus thuringiensis* 8160.
pest control, crop fields, mowing, *Gossypium* 7713.
pest control, diapause, emergence, pupae, genetics, hybrids 347.
pest control, diets, methoprene, *Autographa californica* nuclear polyhedrosis virus virulence 6967.
pest control, insecticides, efficacy 1474.
pest resistance, host plants, *Gossypium hirsutum* 9352.
pesticide resistance, insecticides, methyl parathion 4221.
pesticide resistance, methyl parathion, selection 8667.
pesticide resistance, methyl parathion, susceptibility, insecticides, pyrethroids, USA, South Carolina 4226.
pests, herbivores, damage, *Nicotiana tabacum*, USA, Maryland 4611.
population studies, overwintering, emergence, temperature effects, USA, Arizona 1862.
pupae, survival, cold tolerance, diapause 3627.
pyrethroids susceptibility, methyl parathion pesticide resistance 8201.
sex pheromone, chemical composition, (Z)-11-hexadecenal, (Z)-9-tetradecenal 6578.
temperature effects on predation, eggs, *Solenopsis invicta* 9127.
temperature effects on toxicity, insecticides 8206.
toxicity tests methodology, *Heliothis zea*, molting effects on 3429.
- Heliothis virescens** × **Heliothis subflexa**, sterility, antibiotics effects on 3501.
- Heliothis virescens**, biological control, pathogens persistence, *Bacillus thuringiensis* 724.
larvae, feeding behavior, effects on host plants, *Gossypium hirsutum* 721.
- Heliothis zea**, abundance, seasonal variations, crop fields, USA, Mississippi 3012.
baculovirus isolation, cells 3392.
biological control methodology, sex pheromone, air permeation technique 9346.
biological control, plant extracts, effects on parasitism, *Trichogramma* 5382.
biological control, sex pheromone, population density, effects on mating 9298.
biotypes, mathematical models, development, emergence, USA 2695.
cell culture, nuclear polyhedrosis virus, maintenance, attenuation 5743.
comparison, development time, larvae, pupae, sex differences 1089.
diapause, cytochrome degradation, synthesis, mitochondria 5818.
eggs, parasitoids, host searching behavior, *Trichogramma* 5940.
emergence, tillage effects on 2247.
feeding behavior, host plants effects on, *Zea mays* 2044.
feeding behavior, host plants, pest resistance, *Zea mays* 9318.
feeding behavior, larvae, damage, *Gossypium* aboreum, USA, New Mexico 483.
flight activity, temperature effects 1943.
food consumption, food utilization, infection effects on, *Nomuraea rileyi* 9134.
granulosis virus, pathogenicity 5752.
growth retardation, host plants retardation, *Lycopersicon esculentum* 2083.
host plants, damage, population levels estimation, *Nicotiana tabacum* 8536.
host plants fatty acids effects on growth 4414.
host plants, life cycle, USA, Mississippi 2085.
host preferences, parasites, Colombia 555.
host-parasite interactions, *Apanteles marginiventris*, *Glycine* max, USA, South Carolina 507.
host-parasite interactions, feeding behavior, legumes 445.

Heliothis zea, (continued)

- host-parasite interactions, *Trichogramma pretiosum*, USA, Georgia 2023.
- hosta, diets, toxins, parasitoids, *Hyposoter exiguae* 3578
- infection susceptibility, nuclear polyhedrosis virus 5746.
- infestation, damage, yield, *Gossypium* 8526
- integument, biochemical analysis, proteins, structure 885.
- kaironomes, biological control, effects on host searching behavior, *Trichogramma pretiosum* 423.
- kaironomes, host plants effects on, parasitoids, *Microplitis croceipes* 2824.
- larvae, cell culture, nuclear polyhedrosis virus, proteins, enzyme-linked immunosorbent assay 1091
- mating behavior, role, visual stimuli, pheromones 8253
- mortality, *Baculovirus heliothis* 3450.
- nuclear polyhedrosis virus, replication, cell lines, biological control 3414.
- oviposition, host plants, *Arachis hypogaea* 6106.
- oviposition, site preferences, host plants, *Lycopersicon esculentum* 6166.
- oviposition, site selection, host plants, *Lycopersicon esculentum* 2081.
- parasites, abundance, crop fields, *Trichogramma* 2888.
- parasitoids, crop fields, USA, Mississippi 6168.
- pathogens incidence, *Sorghum vulgare* crop fields, USA, Georgia 3407.
- pathology, infection, *Beauveria bassiana* 5750.
- pathology, infection, conidia, enzymatic activity, *Beauveria bassiana* 5028.
- pest control, crop fields, mowing, *Gossypium* 7713.
- pest control, pathogens, adjuvants, efficacy 8457.
- pest control, pathogens, baculovirus 7371.
- pest control, pheromone traps, efficacy 1475.
- pest control, population density, pheromones concentration, effects on mating, suppression 4610.
- pest control, suppression, mating, oviposition, sex pheromone 4624.
- pests, feeding site preferences, *Apium graveolens* 8550.
- pests, herbivores, damage, *Nicotiana tabacum*, USA, Maryland 4611.
- pests, predator-prey interactions, precipitin test 1690.
- population dynamics, agricultural ecosystems, *Glycine* max 6141.
- population dynamics, *Guadalupe* 6870.
- pupae, survival, cold tolerance, diapause 3627.
- putrescine, hemolymph, physiology, gut microflora biosynthesis 5684.
- rearing, harvesting methodology automation, pupae 8024.
- RNA polymerase, isolation, characterization 1511.
- sampling methodology, crop fields, *Lycopersicon* 8529.
- sex pheromone components, attractancy, effects on mating behavior 3540.
- susceptibility, *Spodoptera frugiperda* 9011.
- toxicity, phenol, *Lycopersicon esculentum* foliage 5793.
- toxicity tests methodology, *Heliothis zea*, molting effects on 3429.
- Heliothrips haemorrhoidalis**,
 - parasites, new records, *Goetheana parvipennis*, Bahama Is. 4744.
- Heliotropium**,
 - host plants, attraction, surveys, *Artichoke*, *Ctenochloa*, *Donax*, Kenya 5962.
 - host plants, feeding behavior, males, new species, *Gabonia gabriela* 3987.
- Heliotropium europaeum**,
 - weed control, biological control, *Longitarsus alabineus*, feeding behavior, Australia 2950.
- Helix virescens**,
 - parasitoids, seasonal variations, crop fields, USA, Florida 4374.
- Helix aspersa**,
 - food consumption, predatory behavior, *Porrothele antipodiana* 9121.
- Helix pomatia**,
 - ovoviviparity, embryogenesis, molting, juvenile hormones, morphology 3514.
- Helix**,
 - taxonomy, keys, morphology, larvae 1657.
- Helix rogersi**,
 - morphology, instars, taxonomy, keys 1657.
- Helix uddali**,
 - diets, rearing 1746.
 - host plants effects on fecundity, longevity 6806.
- Heliocharis lividus**,
 - taxonomic revision, morphology, habitat, geographical distribution, Europe 7170.
- Heliocharis obscurus**,
 - taxonomic revision, morphology, habitat, geographical distribution, Europe 7170.
- Heliocharis punctatus**,
 - taxonomic revision, morphology, habitat, geographical distribution, Europe 7170.
- Heliconia biftida**,
 - larvae, morphology 4930.
- Helopeltis antonii**,
 - life cycle, diets, pests, Sri Lanka 4532.
 - nests, pests, chemical control, Sri Lanka 677.
- Helophorus nequialis**,
 - taxonomy, karyotypes 6259.
- Helophorus aquaticus**,
 - taxonomy, karyotypes 6259.
- Helothia zea**,
 - chemical stimuli, pheromones, vision, effects on mating behavior 4291.
- Helper factor**,
 - effects on adsorption, potato virus Y, tobacco mosaic virus, diets, *Myzus persicae* 3416.
 - role, disease transmission, watermelon mosaic virus, turnip mosaic virus, *Myzus persicae* 3706.
- Hemagglutination**,
 - hemolymph, *Acrididae* 3307.
- Hemagglutinin**,
 - specificity, erythrocytes, man, *Centruroides sculpturatus* 8438.
- Hemagglutination**,
 - proteins, hemolymph, larvae, *Leptinotarsa decemlineata* 4160.
- Hemagglutinin**,
 - activity, purification, physicochemical properties, *Teleogryllus commodus* 157.
- Hemaphysalis punctata**,
 - host preferences, blood meals, habitat, Netherlands, Texel I 4388.
- Hemaria tikva**,
 - new records, geographical distribution, Iberian Peninsula 7078.
- Hematology**,
 - blood cells classification systems, *Nepa cinerea* 99.
 - Glossina morsitans morsitans*, *Glossina pallidipes* 3308.
 - hemoglobin, biochemical analysis, *Chironomus thummi thummi* 3306.
- Hematophagy**,
 - cattle, *Chrysops*, *Hybomitra*, *Tabanus*, Canada, Quebec 2802.
 - Culicidae, Chironomidae, Australia, Northern Territory 3678.
 - effects of preceone II, molting, metamorphosis, larvae, *Rhodnius prolixus* 364.

Hematophagy, (continued)

- feeding behavior, chemical stimuli, *Simulium venustum* 5921.
- feeding behavior, surveys, 15 families, *Diptera*, Sweden 4351.
- host preferences, disease transmission vectors, *Aedes*, *Culex*, USA, Iowa 1198.
- livestock pests, disease transmission, *Stomoxys calcitrans*, *Tabanidae* 3743.
- parasites, effects on blood, *Bubalis bubalis*, *Haematopis tuberculatus*, India 5280.
- pest control, chemical control, *Diptera* 3656.
- phagostimulants, reviews, *Arthropoda* 492.
- sense organs, electrophysiological recording, methodology, bibliographies, *Arthropoda* 4758.
- Hemideina thoracica**,
 - circadian rhythms, locomotor activity, environmental effects, New Zealand 4964.
- Hemerobius stigma**,
 - eggs, morphology 5639.
- Hemideina**,
 - stridulatory apparatus, morphology, bioacoustics, sound frequency 5020.
- Hemideina crassidens**,
 - morphology, histology, ear 136.
 - ultrastructure, ear 138.
- Hemideina thoracica**,
 - circadian rhythms, locomotor activity, feedback models 916.
 - locomotor activity circadian rhythms, temperature effects 155.
- Hemilenia olivae**,
 - population density, grasslands, habitat, USA, New Mexico 8374.
- Hemileptus aphanicus**,
 - water balance, and zones 2606.
- Hemileptus reaumuri**,
 - water balance, and zones 2606.
- Hemileuca groei**,
 - life history, morphology, host plants, 7508.
- Hemileuca maia peigleri**,
 - new species, taxonomy, morphology, USA, Texas 6446.
- Hemileuca olivae**,
 - eggs persistence, grazing, rangelands, USA, New Mexico, Lincoln Co. 8575.
 - eggs, proteinase inhibitors, purification, characterization 2573.
 - larvae, activity patterns, movements, grasslands, USA, New Mexico 3653.
 - population density, larvae development, ecological distribution effects on 604.
 - population dynamics, life history, USA, New Mexico 5899.
 - proteinase inhibitors, embryos, characterization 4245.
 - water loss vapors, density, eggs 234.
- Hemilicula segmentaria**,
 - carion, community composition, succession, Costa Rica 5166.
- Hemiptera**,
 - abundance, salt marshes, USA, Florida 5241.
 - overwintering behavior, ecological distribution, USA, South Carolina 455.
 - parasites, check lists, *Mammalia*, New Zealand 1331.
 - parasites, *Coreotarsus*, Asia, Australia 1581.
 - pests, pest control, abundance, *Persea* fruits 1454.
 - predator-prey interactions, *Lepidoptera* 586.
 - species composition, freshwater environments, species richness, macrophytes, British Isles, Norfolk Breckland 6234.
 - taxonomy, Australia, Northern Territory 3208.
- Hemipterocerus indicus**,
 - pest control, predators, *Dysdercus koenigi* 2972.
- Hemipyrilla ligurvens**,
 - association, human settlements, India, West Bengal 9210.
- Hemiscarapies coccophagus**,
 - development, molting, hypoxi 7435.
- Hemocyania**,
 - active sites, amino acid sequence, *Euryelma californicum* 8925.
 - biochemical analysis, quaternary structure, *Euryelma californicum* 3305.
 - structure, subunits, heterogeneity, *Androctonus australis* 3320.
- Hemocytes**,
 - erythrocyte B effects on, *Periplaneta americana* 5789.
 - Insecta, role, immune response, self-assessment 6604.
 - physical characteristics, taxonomy, ecophysiology 6543.
- Hemoglobin**,
 - heterogeneity, electrophoresis, cyanide, *Chironomus thummi* 920.
 - physiology, oxygen exchange, buoyancy, aquatic animals, *Anisops assimilis* 1743.
- Hemoglobulins**,
 - antigenicity, *Chironomus thummi* 4990.
- Hemolymph**,
 - β -N-acetyl-D-glucosaminidase, characterization, *Bombix mori* 7282.
 - amino acid composition, diapause pupae, *Heliothis armigera* 2676.
 - amino acids, larvae, *Diastria obliqua* 7306.
 - amino acids, nutrition, larvae, *Bombix mori* 2709.
 - amino acids, parasitism effects on, *Camptolius chionidae*, *Heliothis armigera* 1022.
 - γ -amino butyric acid, effects on neurophysiology, *Lepidoptera* 4152.
 - bioaccumulation, metabolites, tyrosine metabolism, *Bombix mori* 2570.
 - biochemical analysis, hysteresis proteins, *Oncopterus fasciatus* 1756.
 - biochemistry, environmental effects, stress, ontogeny, *Spodoptera exigua* 3371.
 - blood cells, ultrastructure, phagocytosis, *Drosophila melanogaster*, *Drosophila* 2542.
 - carbohydrate composition, radiation effects on, *Musca domestica* 1753.
 - carbohydrates, comparative studies, hybrids, *Apis mellifera* 771.
 - cations, vitration, diets, developmental stages, *Bombix mori* 5673.
 - cells, binding, foreign bodies, *Bombix mori* 4148.
 - cells, *Formica ruginosa*, *Formica fusca* 6542.
 - cells, parasites effects on, *Plagiathynchus cylindraceus*, *Armadiidilium vulgare* 1012.
 - cells, ultrastructure, cytochemistry, *Drosophila melanogaster* 6517.
 - chemical composition, temperature effects, water stress, *Spodoptera exigua* 4173.
 - Chironomus fumiferana larvae, lysis, *Entomophthora egressa*, *Paramecium caudatum*, *Euglena gracilis* 5026.
 - circulatory system, metabolism, *Periplaneta americana* 4989.
 - clotting, immunochemistry, *Leucophaea madrae* 4147.
 - effects on adherence, filopodium elongation, leukocytes (granulocytes), *Bombix mori* 8073.
 - extracts, cardiotoxins, *Mollusca*, larval, *Phonurus* 9018.
 - β -glucosyl-O-tyrosine, larvae, *Bombix mori* 2562.
 - hemagglutination, *Acrididae* 3307.
 - hemagglutinins activity, purification, physicochemical properties, *Teleogryllus commodus* 157.
 - hematology, *Glossina morsitans morsitans*, *Glossina pallidipes* 3308.

Hemolymph, (continued)

- histopathology, *B. thuringiensis*, *P. rapae*, *Lymantria dispar*, *Ephestia cautella* 1381
- hormones, chemical composition, effects on immobilization, *Sarcophaga bullata* 204
- hormones, ecdysteroids, molting, instars, *Mamestra brassicae* 3727
- hydrocarbons transport, cuticle, *Periplaneta americana* 7307
- 20-hydroxyecdysone, effects on melanization, pupation, *Deilephila nerii* 8094
- 20-hydroxyecdysone, effects on melanization, pupation, *Deilephila nerii* 8956
- hyperplasia, octopamine, *Locusta migratoria* 174
- immune response, pathogenicity, *Bacillus cereus*, *Galleria mellonella* 5720
- immunity, effects on ultrastructure, *Pseudomonas aeruginosa*, *Galleria mellonella* 8134
- insulin-like peptides, purification, *Manduca sexta* 5685
- isozymes, larvae, morphogenesis, *Apis mellifera* 5827
- isozymes, enzyme activity, reproduction, *Diplolepis punctata* 6657
- larvae, pupae, chemical composition, *Manduca sexta* 2576
- leucine kinetics, *Achoea janata* 2559
- leucine metabolism, kinetics, *Achoea janata* 4988
- lipid composition, migration, *Danaus plexippus* 2566
- lipids + proteins, terminology, lipophorins, insects 94
- lipids, nuclear polyhedrosis virus infection effects on, *Spodoptera littoralis* 3411
- lipids, oocytes, bioaccumulation, vitellogenesis, *Locusta migratoria* 395
- lipoproteins, immunodiffusion, immunoelectrophoresis, *Locusta* 1767
- lipoproteins, lipid metabolism, *Locusta migratoria* 3328
- lipoproteins, purification, characterization, *Locusta migratoria* 2555
- octopamine effects on adenylate cyclase activity, *Malacosoma disstria* 8976
- pathogens, biological control, larvae, *Bacillus thuringiensis*, *Achoea janata* 2644
- pathology, infection, *Bacillus popilliae*, *Anomala corpulenta*, *Holotrichia oblitata* 2640
- pH, ions, *Bacillus thuringiensis* effects on, *Achoea janata*, *Spodoptera litura* 7378
- protease inhibitors, metamorphosis, *Bombyx mori* 7478
- protein biosynthesis, developmental stages, fat body sequestering, *Calpodus ethiops* 6557
- protein composition, coloration, population studies, *Phaenocarpa spumaria* 8945
- proteins, γ radiation effects on, *Dacus dorsalis* 7358
- proteins, antibiotics, chloramphenicol effects on, nutrient deficiency, *Apis mellifera* 8110
- proteins, binding, juvenile hormones, larvae, *Diatraea grandiosella* 207
- proteins, diets, *Dysdercus koebeii* 7480
- proteins, hemagglutination, larvae, *Leptinotarsa decemlineata* 4160
- proteins, nuclear polyhedrosis virus infection effects on, *Heliothis armigera* 4200
- proteins, oogenesis, *Rhynchosciara americana* 3516
- proteins, uptake, oocytes, *Cynodes peregrinus* 4271
- proteins, workers, seasonal variations, polyphenism, *Apis mellifera* 3339
- protobiont pigment, *Argas arboreus* 6540
- putrescine, physiology, *Heliothis zea* 5684
- radiation, chemosensitization, infection, pathogens, *Staphylococcus aureus*, *Anthonomus grandis* 5711
- sodium, potassium, sex differences, *Schistocerca gregaria* 6571
- storage protein biosynthesis, fat body, *Galleria mellonella* 6572
- α , α -trehalase enzymatic activity, induction, *Apis mellifera* 164
- ultrastructure, cytochemistry, tumor cells, mutants, *Drosophila melanogaster* 6516
- water balance, flight, *Rhodnius prolixus* 7351
- Hemolysis**, purification, *Stomoxys calcitrans* 178
- Hemolytic anemia**, vesipale stages, case reports, man 9231
- Hemopoietic system**, cells, ultrastructure, cytochemistry, *Drosophila melanogaster* 6517
- ultrastructure, cytochemistry, tumor cells, mutants, *Drosophila melanogaster* 6516
- Hematophagy**, parasitism, effects on hosts development, *Mantissa uhleri*, *Lycosa rabida* 4369
- Hempea**, chemosensitization, pest control, *Dermatobia hominis* 5351
- topical application, chemosensitization, *Scolytus multistriatus* 8234
- Hemosepiplachna australica**, transmission, *Solanum nodiflorum* mottle virus 278
- Hemosepiplachna guttataustalica**, transmission, *Solanum nodiflorum* mottle virus 278
- Hemosepiplachna pustulosa**, population dynamics, life history, environmental effects 2860
- Hemosepiplachna sparsa**, transmission, *Solanum nodiflorum* mottle virus 278
- Hemosepiplachna vigintioctopunctata**, capture-recapture studies, marking methodology, survival 3245
- fat body development, photoperiod sensitivity, diapause 7456
- Hermes titurus**, new records, geographical distribution, Spain 7076
- Hepatoapneures**, ultrastructure, diets effects on, *Armadillidium vulgare*, *Porcellio scaber* 6589
- Hepatozoon erhardovae**, parasites, development, Siphonaptera 4183
- Hepialus**, food organisms, feeding behavior, burnt ground, heaths, *Pyrrhocorax pyrrhocorax* 6827
- Hepialus adriaticus**, new records, geographical distribution, Greece 4731
- Hepialus fuscogrisea**, growth, nymphs, Sweden, Ricklean R. 3850
- Hepialus lateralis**, occurrence, streams, acid rain, pollution effects, British Isles, Scotland 8607
- Hepialus persimilis**, taxonomy, morphology 3207
- Hepianone**, boarding behavior, *Apis mellifera*, *Adonsonii* 8300
- Herbicides**, effects on nontarget organisms, abundance, soil, Arthropoda 5259
- malathion, chemical control, larvae, *Culex pipiens* 1038
- mutagenicity testing, pollution effects, *Drosophila melanogaster* 4684

Herbicides, (continued)

- toxicity, dinoseb-acetate, effects on, developmental stages, *Culex pipiens* 682
- toxicity, nontarget organisms, *Apis mellifera* 5044
- toxicity, pest control, *Carabidae* 9021
- Herbivores**, biological control, population dynamics, Chrysomelidae, agricultural ecosystems 2211
- check lists, entomofauna, Manihot esculenta, Insecta 4528
- check lists, vectors, disease transmission, cadang-cadang, Insecta, Philippines 3804
- clones, host-parasite interactions, *Solidago*, *Uroleucon caligatum* 5963
- community composition, Insecta, salt marshes, nutrient enrichment, Spartina 2290
- community composition, leaf litter, Insecta 9187
- competition, community structure comparison, reviews, Insecta 593
- ecological distribution, host plants, reviews, *Xanthium spinosum*, *Xanthium strumarium*, Insecta, World 8357
- effects on abundance, recruitment, Insecta, *Haplophragma squarrosus*, USA, California 6783
- effects on seedlings survival, *Gutierrezia microcephala*, *Hesperotettix viridis* 7556
- environmental impact, plant communities, *Hesperotettix viridis*, *Gutierrezia sarothrae*, *Machaeranthera canescens*, USA, New Mexico 2063
- feeding behavior, antifeedants, biological properties, Insecta 8294
- food consumption, resistance, *Zea mays*, *Spodoptera eridania* 4602
- grazing, effects on, *Rumex crispus*, *Gastrophysa viridula* 4408
- guilds, population-environment relations, population density, species diversity, leafminers, Insecta 3632
- host plants, chemical composition, tannins, reviews, Insecta 6010
- host plants, host preferences, host selection, sensory stimuli, Insecta 8070
- host selection, nutrients, feeding stimulation, *Gastrophysa atrorufa* 486
- interspecific relationships, algae, Diptera, USA, California 3858
- interspecific relationships, competition, mortality, *Notoxina elongata*, *Megalocera recticornis* 3631
- mortality, host plants, leaves, abscission, Insecta 5240
- nutrients, food plants, phenols, *Anacardium melanorrhodon* 7308
- Oecophoridae, Papilionidae, phototoxicity, Umbelliferae, furanocoumarins, USA, New York 2079
- pests, damage, *Nicotiana tabacum*, *Heliothis virescens*, *Heliothis zea*, USA, Maryland 4611
- species richness, seasonal variations, larvae, Macrolepidoptera, Finland 4327
- species-area relation, host plants, species composition, Typhlocybidae, British Isles 5965
- weed toxicity, *Conium maculatum*, *Hyadaphis foeniculi*, *Euselidius variatus*, *Papilio zelicaon*, USA, California 8353
- Herbivory**, coevolution, host plants trees, Insecta, British Isles 2846
- damage, reproduction adaptations, Lepidoptera larvae, *Juncea mollis* 9164
- foliage damage, *Eucalyptus blakei*, Insecta, Australia 2045
- herbivory, defoliation, *Pubilia concava* effects on, *Solidago altissima* 2073
- mortality, leaf area reduction, *Chamaedaphne calyculata*, *Coptodisca kalmiella* 530
- susceptibility, host plants, vegetation patterns effects on, *Aristolochia reticulata*, *Battus philenor* 2072
- Hercinotrips femoralis**, development, diets effects on 6645
- Hercotomus quadrifidus**, morphology, identification keys, taxonomy 6499
- Heredity**, selection, biotypes, food preferences, *Nilaparvata lugens* 2340
- Heriades truncorum**, life history, population dynamics 5136
- nest building, foraging behavior, rhythms 4458
- nest building, orientation, food preferences 4453
- Heritability**, albinism, genetics, *Melanoplus sanguinipes* 6269
- genetic variance, selection, linkage, *Drosophila melanogaster* 5441
- longevity, races, *Apis mellifera* 1559
- morphometry, larvae, age effects, *Drosophila melanogaster* 2689
- mutants, eyes color, *Culex pipiens pallens* 4685
- mutation, *Culex pipiens fatigans*, India, Aligarh 3904
- pest resistance, crops, *Pennisetum americanum*, *Blissus leucopterus* 4638
- pest resistance, host plants, *Atherigona* 4566
- pesticide resistance, malathion, DDT, dieldrin, *Plodia interpunctella* 1560
- pesticide resistance, methyl parathion, selection, *Heliothis virescens* 8667
- water loss, *Drosophila melanogaster* 7865
- Hermannomyia odyroidi**, new species, taxonomy, morphology, Lesotho, South Africa 4832
- Hermaphrodites**, morphology, adults, identification, *Icerya purchasi* 1722
- Hermatobates haddoni**, synonymy, *Hermatobates walkeri* 3208
- Hermatobates walkeri**, synonymy, *Hermatobates haddoni* 3208
- Herpes genitalis**, association, scabies, man 3696
- Herpes simplex virus 2**, scabies association, case reports, man 3696
- Herpetomonas ampelophilae**, parasites, attachment, gut, malpighian tubules, *Drosophila melanogaster* 3408
- Herpyllus propinquus**, activity patterns, abundance, seasonal variations, USA, New Mexico 1953
- Hersilia savignyi lucas**, neurosecretion cells, eye 2527
- Hesperandria**, morphology, mouthparts, genitalia 6505
- Hesperia ottoe**, oviposition, reproductive behavior, host plants, *Echinacea pallida* 8246
- Hesperidae**, ejaculatory duct, simplex, histology, *Calpodus ethiops* 9041
- spermogenesis, *Calpodus ethiops* 9054
- surveys, entomofauna, Mongolia, People's Rep. 4736
- testes development, *Calpodus ethiops* 9065
- Hesperioidea**, diapause, overwintering, North America 6880
- Hesperocimex**, continuous culture, magnetic fields, effects on mutation, fecundity 7493

Subject Index

- Hesperoperla pacifica**, sedimentation, ash, streams 6236.
- Hesperoteletia viridis**, environmental impact, ecological distribution, plant communities, USA, New Mexico 2063.
- herbivores, effects on seedlings survival, *Gutierrezia microcephala* 7556.
- Hesperus**, new species, morphology, geographical distribution, New Guinea 2398.
- Heuschia**, taxonomy, synonymy, *Mesembrymus* 4050.
- Heuschyotya punctata**, new species, taxonomy, morphology, Ecuador 8758.
- Heteraeria mendezi**, new species, taxonomy, morphology, Argentina, Misiones, Iguazu 6452.
- Heteraeria vulneraria**, territorial behavior, copulation, mating behavior, protection, females 4299.
- Heteraeria ottomana**, new species, taxonomy, morphology 8768.
- Heterarthrus aceri**, new records, geographical distribution, Switzerland 7095.
- Heterarthrus limbosensis**, new species, taxonomy, morphology, Crete 6427.
- Heteroceridae**, keys, morphology, Sweden 7090.
- Heterocerus senescens**, new records, geographical distribution, China 7090.
- banding, nucleolus organizer region localization, *Chorthippus jucundus* 7825.
- brain cells, chromosomes replication, larvae, *Drosophila nasuta* 4678.
- characterization, chromosomes banding, *Drosophila hydei* 2317.
- characterization, karyotypes, taxonomy, *Emmiger* 3092.
- chromosome aberrations, mitotic exchange, *Drosophila melanogaster* 6256.
- chromosomes, cytology, *Gastrancistrus africanus orientalis*, India 3898.
- distribution, metaphase chromosomes banding, comparison *Drosophila nasuta nasuta*, *Drosophila nasuta albomacana* 6265.
- gene mapping, rRNA, genes, chromosomes, *Drosophila melanogaster* 8636.
- homology, meiosis segregation, autosomes, spermatogenesis, *Drosophila melanogaster* 7848.
- hybrids, polytene chromosomes, *Drosophila muelleri*, *Drosophila arizonensis* 5464.
- polymorphism, characterization, *Drosophila melanogaster* 2327.
- population studies, *Gomphocerus sibiricus* 3900.
- recombination, gametes, *Drosophila melanogaster* 3071.
- staining, banding, *Arcyptera fusca* 3085.
- supernumerary, effects on chromosomes banding, *Heteropternis obscurula* 6260.
- Heterocleptes spinosus**, new species, taxonomy, morphology, Borneo 4013.
- Heterodoxus**, surveys, parasites, Petrogale, Australia 2921.
- Heterodoxus ampullatus**, parasites, surveys, Petrogale, Australia 2921.
- Heterodoxus octoseriatus**, parasites, surveys, Petrogale, Australia 2921.
- Heterodoxus spiniger**, feeding behavior, blood meals 9123.
- Heteroduplex**, DNA, analysis, kinetoplasts, *Citridia luciliae* 8627.
- Heterogagrella biseriala**, new species, taxonomy, morphology, Thailand 5550.
- Heterogamnia stylica**, abundance, soil fauna, agricultural ecosystems, Egypt 7011.
- Heterogeneity**, juvenile hormones, binding, fat body, *Blattodea* 209.
- microbodies, nucleoids, *Aldrichina grahami* 881.
- Heterohyrax brucei**, hosts, *Isodes matoi*, Zimbabwe 519.
- Heteromera**, range, geographical distribution, 7 families, Europe, Carpathian Mts 8676.
- Heterometrus scaber**, venom, proteins, biochemical analysis 4178.
- venom, proteins, toxins, biochemical analysis 4179.
- venom, toxicity 2182.
- Heteromurus multipunctatus**, new species, taxonomy, morphology, Papua New Guinea 3988.
- Heteromurus strebelli**, new records, geographical distribution, Ecuador 3988.
- Heteromurus tenuicornis**, morphology, Micronesia 3988.
- Heteromurus tetraacanthus**, morphology, Micronesia 3988.
- Heteromys desmarestianus**, hosts, new species, parasites, *Pseudoschoengastia disparunguis* 1590.
- Heteronychia arator**, cell culture, infection, baculovirus 2650.
- cell culture, *Oryctes baculovirus* replication 880.
- feeding deterrents, plant extracts, *Trifolium repens* 6912.
- food consumption, roots, larvae, *Paspalum dilatatum*, *Lolium perenne*, *Trifolium repens* 487.
- larvae, temperature effects, feeding, growth, survival 369.
- plants, vegetation patterns, oviposition, site location, effects on 403.
- population dynamics, dispersion, aggregation, sampling, New Zealand, North Is 1300.
- population dynamics, population regulation, pest outbreaks, New Zealand 6911.
- population dynamics, seasonal variations, mortality, population-environment relations, New Zealand, North Is 1301.
- population dynamics, seasonal variations, temperature effects, mathematical models, New Zealand, North Is 1302.
- rearing methodology, life cycle 8861.
- Heteronychia tenuistriatus**, rearing methodology, life cycle 8861.
- Heteronympha merope merope**, genetics, wings, variations, clines, Australia 3925.
- Heteropeza pygmaea**, ablation, glands, prothorax, reproduction 250.
- embryogenesis, eggs development, follicles epithelium 334.
- sex determination, karyotypes 8622.
- Heterophylus ruficornis**, new genera, taxonomy, morphology, South America 7949.
- Heteropeustes fossilis**, digestive enzymes, developmental stages 2569.
- Heteropodidae**, new records, predators, *Spodoptera litura*, India, Andhra Pradesh 1439.
- Heteropsini**, taxonomy, nomenclature, synonymy 4807.
- Heteroptera**, diets, analysis, methodology 4079.
- host plants, crop fields, *Sorghum vulgare* 2097.
- indole-3-acetic acid metabolism, gut 3311.
- population-environment relations, forest, population density, secondary production, Czechoslovakia 2139.
- records, species composition, zoogeography, Norway 7898.
- Heteropternis obscurula**, supernumerary heterochromatin, chromosomes banding 6260.
- Heterorhabdids**, parasitism, new records, *Graphognathus leucoloma*, Australia 2902.
- symptoms, pathogens, *Xenorhabdus*, *Galleria* 4189.
- Heterorhabdids bacteriophora**, parasitism, mortality, temperature effects, *Galleria mellonella* 1814.
- parasitism, pathology, *Culex pipiens* 4202.
- parasitism, pathology, *Culex pipiens* 5728.
- Heterorhabdids heliothidis**, parasitism, biological control, pests, *Odioryctes sulcatus* 2188.
- pathogens, susceptibility, mortality, larvae, *Choristoneura fumiferana* 9014.
- Heterosis**, histones, hybrids, age effects, *Drosophila melanogaster* 3453.
- intraspecific hybridization, population genetics, *Drosophila ananassae*, India 3915.
- Heterospilis praeopidis**, parasitoids, sex ratio, hosts body size effects on 7538.
- Heterosternus**, taxonomic revision, morphology, keys 4771.
- Heterotarsonemus egregius**, new species, taxonomy, morphology, USSR, Crimea 6342.
- Heterotermes tenuis**, pests, infestation, Manihot esculenta crop fields, Brazil, Para State 4597.
- Heterostyptis**, allozymes, divergence, *Drosophila* 3920.
- courtship, mating behavior, eye color mutants, *Drosophila melanogaster* 6276.
- enzyme polymorphism, genotypes, distribution, *Anthonomus grandis thurberiae*, *Anthonomus grandis grandis*, USA, Arizona 2339.
- enzymes polymorphism, parthenogenesis, *Drosophila mercatorum*, USA, Hawaii 3116.
- enzymes, population genetics, geographical distribution, *Drosophila* 2349.
- Est-a gene, X chromosome, enzymatic activity, *Drosophila virilis* 1531.
- inbreeding effects on, colonial characteristics, *Apis mellifera* 1548.
- karyotypes, population genetics, *Chironomus annularis* 8656.
- population genetics, laboratory animals, quality control, *Choristoneura occidentalis* 8658.
- Heterozygotes**, ctn gene, aldehyde oxidase activity, developmental stages, *Drosophila melanogaster* 7857.
- mating types, fertility, genetics, translocations, *Musca domestica* 2328.
- mutation, wings, homoecis, *Drosophila melanogaster* 3901.
- Hexachlorocyclohexane**, toxicity tests, topical application, *Drosophila* 5045.
- Hexaculus guyanensis**, infestation, parasites, new species, *Metaparasitylenchus guadeloupensis* 6613.
- (E)-10-Hexadecenal, chemical composition, sex pheromone, attractancy, males, *Dichocrocis punctiferalis* 7341.
- (Z)-11-Hexadecenal, pheromone traps, efficacy, *Chrysoteuchia topiaria* 2226.
- (Z)-9-Hexadecenal, pheromone traps, efficacy, *Chrysoteuchia topiaria* 2226.
- Hexagenia**, abundance, pollution effects, America, Erie L. 8619.
- environmental impact, nitrogen, sulfur, sediments, lakes 8601.
- Hexagenia bilineata**, substrate preferences, habitat selection, nymphs 3853.
- Hexameris**, parasites, infection, seasonal variations, *Lymantria dispar*, Japan 5753.
- Hexameris glossinae**, parasites, infestation, *Glossina* 9213.
- Heydenia unica**, host-parasite interactions, *Dendroctonus frontalis* 505.
- Hibernation**, activity, physiology, *Culex salinarius* 660.
- diapause, overwintering, *Papilionidea*, *Hesperioidea*, North America 6880.
- larvae, polytene puffing, *Chironomus plumosus* 761.
- leaf litter, stands, *Ips typographus*, *Picea* 9004.
- metabolism, cold resistance, *Dendroctonus micans* 6560.
- molt, reproduction, feeding behavior, *Lagynochthonius hygricus* 5251.
- photoperiod, diapause, diapause, *Spharctia imparis* 7439.
- population dynamics, *Euscelinus incisus*, German Dem. Rep., Thuringia 7575.
- Hibiscus cannabinus**, pests, *Podagrica punctellus*, Sudan 2852.
- Hibiscus esculentus**, crop fields, pest control, *Podagrica uniflora*, *Podagrica sjostedti*, Nigeria 5402.
- volatiles, attractants, parasites, *Eucelatoria* 4321.
- Hibiscus esculentus okra**, host plants, nymphs, distribution, aggregation, *Amrasca biguttula biguttula* 5298.
- Hierarchy**, reproductive status, founders, *Polistes gallicus* 5060.
- High mobility group proteins**, purification, characterization, nuclei, embryos, *Drosophila melanogaster* 7473.
- High-altitude environment**, geographical distribution, abundance, *Liriomyza huidobrensis*, Argentina 6704.
- Hilaira**, taxonomic revision, systematics, check lists, species 7153.
- zoogeography, geographical distribution, USSR 7905.
- Hilipinus nearcticus**, new species, taxonomy, morphology, new records, USA 4811.

- Hiliella**, new genera, Australia, Northern Territory 3208.
- Himalotrechodes insignis**, new species, ecological distribution, morphology, Nepal 17.
- Himeunka**, taxonomic revision 4018.
- Himeunka balua**, new species, taxonomy, morphology 4018.
- Himeunka chibana**, new species, taxonomy, morphology 4018.
- Hindgut**, epithelium, histology, ultrastructure, *Notonecta glauca* 3310.
- Hipparchia parisiata**, predation, population regulation, Oman 5215.
- Hippastrum hybridum**, food plants, antrifedians, *Schistocerca gregaria* 7348.
- Hippoboscidae**, disease transmission, anaplasmosis, cattle 2169.
- Hippoboscidae**, ectoparasites, birds, new records, USA, Alaska 520.
- Hippodamia convergens**, dispersal, flight activity, ovary development 5211.
- Hippodamia convergens**, dispersal flight, ovary development, environmental factors 9171.
- Hippodamia convergens**, food preferences 1197.
- Hippodamia convergens**, habitat preference, hibernacula, grasses, *Panicum coloratum*, *Eragrostis curvula* 7625.
- Hippodamia convergens**, larvae, foraging behavior, predator-prey interactions, *Acyrtosiphon pisum* 2870.
- Hippodamia convergens**, larvae, movements, host plants 5957.
- Hippodamia convergens**, nontarget organisms, insecticides toxicity 8172.
- Hippodamia convergens**, nontarget organisms, toxicity, chloridineform 4227.
- Hippodamia convergens**, nontarget organisms, toxicity, insecticides carriers 5785.
- Hippodamia convergens**, predators, eggs, mortality, *Empoasca fabae* 6046.
- Hippodamia quinquevittata**, winter survival, aggregation, Canada, Alberta 3637.
- Hippotion osiris**, historical account, bibliographies, geographical distribution, morphology, Spain 3142.
- Hirmocystis lepropi**, intestinal parasites, *Lepropus* 2128.
- Hirsutiella thompsonii**, pathogens, infection, *Lymantria dispar* 5741.
- Hirsutiella thompsonii**, pathogens, pest control, *Phyllocopra olivaria*, USA, Florida 4548.
- Hirundo rustica**, parasites, *Myrsidia rustica*, *Phlopterus*, Spain 8046.
- Hispinae**, competition, coexistence, niche overlap 8366.
- Hispinae**, host plants chemical composition effects on growth 615.
- Histamine**, antagonism, saliva, *Rhodnius prolixus* 3385.
- Histamine**, attachment sites, pest resistance, guinea-pigs, *Dermacentor andersoni* 6069.
- Histamine**, release, allergens, man, *Dermatophagoides farinae* 1372.
- Histamine**, translocation, inflammation, parasitism, *Bos taurus*, *Boophilus microplus* 2912.
- Hister coenosus**, life cycle, biology, reproduction, laboratories 1989.
- Hister incertus**, life cycle, biology, reproduction, laboratories 1989.
- Hister pushtiger**, carrion, community composition, succession, Costa Rica 5166.
- Hister ruwenzoricus**, new species, taxonomy, morphology 8768.
- Histeridae**, abundance, seasonal variations, livestock feces, USA, Texas 4481.
- Histeridae**, taxonomy, morphology, New Guinea 2393.
- Histerini**, bionomics, systematics 8766.
- Histiogaster unguis**, vectors, disease transmission, *Metarhizium anisopliae*, *Hyllobius pales* 6047.
- Histiogaster unguis**, natural enemies, *Necrocheta bruchi*, *Necrocheta eichhorniae*, Argentina 8379.
- Histochemistry**, absorption spectroscopy, polytene chromosomes, *Drosophila melanogaster* 760.
- Histochemistry**, aldehyde oxidase, imaginal discs, enzymatic activity, *Protophila* 955.
- Histochemistry**, ATP pyrophosphatase, role, coloration, *Carassius auratus* 3363.
- Histochemistry**, central nervous system, biogenic amines, *Anthonomus grandis* 126.
- Histochemistry**, development, morphology, esophageal bulb, *Rhagoletis pomonella* 8076.
- Histochemistry**, digestive tract, *Abedus ovatus* 160.
- Histochemistry**, localization, bioaccumulation, diflufenbureon, tissues, resistance, *Pieris brassicae* 1059.
- Histochemistry**, midgut, larvae, *Manduca sexta* 188.
- Histochemistry**, milk production glands, *Melophaga ovinus* 3389.
- Histochemistry**, peritrophic membrane, midgut, membrane structure, *Thrips validus* 7312.
- Histochemistry**, photoreceptors, acetylcholinesterase, eye, *Apis mellifera* 3299.
- Histochemistry**, reproductive organs, semen receptacles, *Glossina morsitans morsitans* 3455.
- Histochemistry**, vitellogenesis, ultrastructure, *Atta* 5066.
- Histochemistry**, yolk, chemical composition, oogenesis, proteins, *Sarcophaga ruficornis* 1083.
- Histology**, accessory gland, duplex, *Calpodus ethiops* 9040.
- Histology**, aedeagus, glands, males, *Tenebrio molitor* 4181.
- Histology**, aggregation pheromone glands, *Tribolium castaneum* 8115.
- Histology**, anatomy, reproductive organs, spermatheca, *Gesoniella punctifrons* 328.
- Histology**, apical tissue, ovary, testis, *Leptinotarsa decemlineata* 7427.
- Histology**, bites, case reports, domestic animals, *Dermacentor* 4488.
- Histology**, compound eyes, *Anomala rufocuprea* 7301.
- Histology**, corpora allata, developmental stages, *Achoea junata* 4176.
- Histology**, development, defective mutant, *Drosophila melanogaster* 765.
- Histology**, differentiation, humerus imaginal discs, *Drosophila melanogaster* 331.
- Histology**, digestive tract, *Abedus ovatus* 160.
- Histology**, digestive tract, physiology, *Periplaneta americana* 4992.
- Histology**, digestive tract, *Reduviidae* 158.
- Histology**, digestive tract, *Tetranychus urticae* 2546.
- Histology**, ejaculatory duct, accessory gland, *Stomoxys calcitrans* 5063.
- Histology**, ejaculatory duct complex, *Calpodus ethiops* 9041.
- Histology**, enzymatic activity, digestive tract, *Rhynchosciara americana* 2543.
- Histology**, exocrine glands, blood meals, *Rhipicephalus everti* 3378.
- Histology**, exocrine glands, defense secretions, *Parastizopus armaticeps* 1796.
- Histology**, eye, comparative studies, *Apis mellifera*, *Bombus hortorum* 904.
- Histology (continued)**, functional morphology, digestive tract, *Diplopoda* 161.
- Histology (continued)**, gonads differentiation, *Drosophila* 1080.
- Histology (continued)**, hindgut epithelium, *Notonecta glauca* 3310.
- Histology (continued)**, immunohistochemistry, digestive tract epithelium, *Periplaneta americana* 925.
- Histology (continued)**, immunohistochemistry, neurons, neurosecretion, *Locusta migratoria* 901.
- Histology (continued)**, indole-3-acetic acid effects on gonads, *Dacus dorsalis* 8227.
- Histology (continued)**, larvae, baculovirus infection effects on, *Pandemis heparana* 1825.
- Histology (continued)**, lateral neurosecretory cells, peritrophic glands, *Argas arboreus* 8069.
- Histology (continued)**, malpighian tubules, larvae, *Papilio demoleus* 8930.
- Histology (continued)**, midgut, α radiation effects on, *Dacus dorsalis* 7359.
- Histology (continued)**, midgut, muscles, *Bombyx mori* 2550.
- Histology (continued)**, molting glands, *Nemesis incerta*, *Scodra calceata*, *Legendrella pauliani* 258.
- Histology (continued)**, morphology, esophageal bulb, *Rhagoletis pomonella* 8076.
- Histology (continued)**, morphology, malpighian tubules, *Myliabris pustulata* 929.
- Histology (continued)**, morphology, mouthparts, *Oestromyia leporina* 83.
- Histology (continued)**, neurosecretion cells, brain, ventral nerve cord, *Poecilocus pictus* 5666.
- Histology (continued)**, neurosecretion cells, eye, *Hersilia savignyi* lucas 2527.
- Histology (continued)**, neurosecretion, optic lobe, *Poecilocus pictus*, *Periplaneta americana*, *Belostoma indicum*, *Polistes hebraeus*, *Sandrocotus dejeani* 4180.
- Histology (continued)**, oogenesis, vitellogenesis, *Lucilia cuprina* 2668.
- Histology (continued)**, ovary development, polyploids, *Bombyx mori* 1087.
- Histology (continued)**, ovary, developmental stages, aging methods, pediculus humanus 4242.
- Histology (continued)**, reproductive organs, genitalia, mutants, intersexes, *Drosophila melanogaster* 5064.
- Histology (continued)**, reproductive organs, *Parastizopus armaticeps* 9033.
- Histology (continued)**, salivary gland, mitochondria, ATP levels, *Chironomus tentans* 4952.
- Histology (continued)**, salivary gland, secretions, *Reduviidae* 252.
- Histology (continued)**, sensilla, wings, *Cetonia aurata*, *Geotrupes silvaticus* 7302.
- Histology (continued)**, sex pheromone glands, *Lymantria dispar* 5013.
- Histology (continued)**, spermatheca, *Gesoniella punctifrons* 9034.
- Histology (continued)**, spermatids, cyst cells, spermatogenesis, *Myogryllus* 5065.
- Histology (continued)**, sternal gland, epidermis cells, *Mischocyttarus flavitarsis*, *Mischocyttarus drewseni*, *Mischocyttarus mexicanus* 5015.
- Histology (continued)**, symptoms, scabies, man 2185.
- Histology (continued)**, transport epithelium, tubas ventralis, *Tetradontophora bielensis* 4947.
- Histology (continued)**, vitellogenesis, oocytes development, *Jonespella splendens* 9061.
- Histone acetyltransferase**, enzymes, DNA transcription, *Drosophila melanogaster* 5680.
- Histone H3**, genes, insertion sequences insertions sites cDNA nucleotide sequence, gene libraries, *Drosophila melanogaster* 8628.
- Histones**, genes, gene mapping, *Drosophila* 3068.
- Histones**, heterosis, hybrids, age effects, *Drosophila melanogaster* 3453.
- Histones**, nucleotide sequence, evolution, *Drosophila melanogaster* 7879.
- Histopathology**, cuticle lesions, *Glossina pallidipes*, *Glossina brevipalpis*, *Glossina austeni* 8163.
- Histopathology**, cuticle lesions, infectivity, *Glossina morsitans morsitans* 8162.
- Histopathology**, gut epithelium, pathogens effects on, *Pieris rapae*, *Lymantria dispar*, *Ephestia cautella* 7382.
- Histopathology**, infection, *Bacillus thuringiensis*, *Insecta* 7375.
- Histopathology**, oogenesis, tepa, insecticides, pest control, *Culex pipiens fatigans* 1835.
- Histopathology**, toxicity, δ -endotoxin, *Bacillus thuringiensis*, *Pieris rapae*, *Lymantria dispar*, *Ephestia cautella* 7381.
- Historical account**, bibliographies, *Hippotion osiris*, Spain 3142.
- Historical account**, biological control, *Chrysoschira laticellae*, *Coleophora laticella*, North America 3028.
- Historical account**, infestation, pests, damage, *Pectinophora gossypiella*, USA, California, Imperial Valley 8558.
- Historical account**, medical importance, disease transmission, vectors, *Arthropoda* 2929.
- Historical account**, occurrence, geographical distribution, *Coleoptera*, Sweden 3941.
- Historical account**, surveys, *Mutillidae*, Africa 3949.
- Historical account**, zoogeography, *Dicera herbsti*, Europe 3983.
- Historical accounts**, pest control, *Lymantria dispar*, USA, Michigan 7786.
- Historical ecology**, grasslands, ploughing, ant hills size, *Lasius flavus* 569.
- Hives**, apiculture, construction, *Apis mellifera* 6180.
- Hives**, apiculture, heating methodology, solar radiation 2998.
- Hives**, apiculture, occurrence, *Megachile relativa*, *Megachile nivalis*, Canada, Saskatchewan 4603.
- Hives**, apiculture, predation damage, *Ursus americanus*, *Apis mellifera* 3040.
- Hives**, infestation, *Acarapis woodi*, *Apis mellifera*, Mexico 6181.
- Hives**, mobility, production, apiculture 2978.
- Hives**, overwintering, equipment, apiculture, *Apis mellifera* 6176.
- Hives**, pest control, chemical control, *Varroa jacobsoni*, *Apis mellifera* 4599.
- Hordening behavior**, chemical stimuli effects on, *Apis mellifera* 4322.
- Hordening behavior**, honey, comb surface area, *Apis mellifera* 8585.
- Hordening behavior**, sucrose, 2-heptanone, *Apis mellifera*, *Apis mellifera adonsonii* 8300.
- Hodotermitidae**, nests, fossils, Pleistocene epoch, South Africa, Clanwilliam 5540.
- Hoffmannella beltrani**, synonymy, *Pseudoschoengastia tucali*, Venezuela 4764.
- Hoffmannophila pseudospretella**, stored products pests, abundance, distribution, British Isles, Scotland 2264.
- Holcocephala abdominalis**, diets, foraging behavior, coexistence, *Holcocephala calva*, USA, Maryland 6029.
- Holcocephala calva**, foraging behavior, coexistence, *Holcocephala abdominalis*, USA, Maryland 6029.
- Holcostethus**, identification keys, North America 4941.
- Holcostethus hirtus**, genitalia, morphology, males 4941.
- Holcostethus hirtus**, genitalia, morphology, males 5809.
- Holochroa dissociaria dissociaria**, larvae, morphology, life history 7263.
- Holotrichia consanguinea**, biometrics, sexual reproduction, mating, oviposition 7520.
- Holotrichia consanguinea**, chemical control, efficacy, insecticides 7792.
- Holotrichia consanguinea**, insecticides, toxicity, pest control 7415.

Subject Index

- Holotrichia consanguinea**, (continued)
life history, host plants, pest control, India, Punjab 5363
population density, distribution, host plants, larvae 5364
- Holotrichia obliqua**,
pathology, hemolymph, blood cells, infection, *Bacillus popilliae* 2640
- Holotrichia serrata**,
pest control, chemical control, insecticides 5376
- Holotrochus**,
keys, morphology, 15 new species 7958
- Holporhynchus ramidigitus**,
parasites, digestive tract, *Agriotes* pygmaea, India 1000
- Homalodiscia conglata**,
population dynamics, distribution, citrus blight vectors, USA, Florida 6174
- Homalodiscia insolita**,
population dynamics, distribution, citrus blight vectors, USA, Florida 6174
- Homing behavior**,
foraging behavior, landmarks, food sources, *Apis mellifera* 5113
orientation, *Polistes gallicus* 5114
orientation, wind, *Polistes gallicus*, Italy 1262
stereotyped behavior, *Cataglyphis* 2751
swarms, habitat preferences, *Apis mellifera caucassica*, *Apis mellifera carnica* 6991
- Homocidus**,
new species, taxonomy, morphology, Ecuador, Guatemala 7936
- Homocidus electellum**,
pest control, synthetic sex pheromone efficacy 2201
population levels, pheromone traps, attractiveness 5702
- Homocidus stypticellum**,
life history, predators, seeds, *Cirsium canescens* 5884
predators, seeds, life history, destruction, population density, *Cirsium canescens* 9105
- Homology**,
amino acid sequence, *cecropin B*, *cecropin D*, *Antheraea pernyi*, *Hyalophora* 8952
eye, ultrastructure, *Hydriphantes* 86
genes DNA nucleotide sequence, transposition, *Drosophila melanogaster* 1504
nucleotide sequence, divergence, DNA hybridization, *Drosophila* 5453
polyribosomes, mRNA, nucleotide sequence, developmental stages, *Drosophila melanogaster* 1539
- Homocidus magnipennis**,
pest control, pheromone traps, synthetic sex pheromone 3026
trapping, attractants, synthetic sex pheromone, Japan 5336
- Homonymy**,
taxonomy, Brachiopoda, Lepidoptera 7991
- Homoptera**,
abundance, salt marshes, USA, Florida 5241
allochthonous input, streams energetics 8373
biological control, natural enemies, competition, Lepidoptera, Coleoptera 6095
biological control, Southeast Asia 1451
species composition, taxonomy, morphology, Czechoslovakia 3213
- Homosexual behavior**,
body weight effects on, *Palmaria nana* 1892
- Homogenesis**,
deterrents, mating behavior, sex pheromone, *Glossina morsitans*, *Musca domestica* 224
- Homogyotes**,
mutation, wings, homocidus, *Drosophila melanogaster* 3901
translocations, fitness, genetic factors, *Hylemyia antiqua* 2330
- Hondius**,
new species, geographical distribution, *Dixella nixiae* 29
- Hondius**,
new records, geographical distribution, *Anotylus insignitus* 2371
- Honey**,
apiculture, antibiotics, residues, *Apis mellifera* 2243
apiculture, production, land use effects on, USA, Georgia 6179
contamination, microorganisms, physicochemical properties 8503
contamination, sterilization, α -radiation, *Streptococcus pluron* 8475
food conversion, energy budget, production, efficiency, honey 873
hoarding behavior, combs surface area, *Apis mellifera* 8585
production, apiculture, artificial diets, pollen, *Apis mellifera* 5306
production, apiculture, Canada, Prairie Provinces 8523
production, apiculture, diets, *Apis mellifera* 5304
production, apiculture, economics, Japan 7721
production, correlation analysis, sugar plasma levels, *Apis mellifera* 5325
production, foraging behavior, comparison, strains, *Apis mellifera* 4595
production, methodology, apiculture 2970
production, queens, apiculture 7761
storage, effects on nectar harvest, *Apis mellifera* 8593
toxicity, case reports, *Rhodoendonea* pollen, *Apis mellifera*, Nepal 5321
yield, comb construction effects on, apiculture 3775
- Honeydew**,
excretion, measuring techniques, methodology, *Nilaparvata lugens* 4082
secretion, barley yellow dwarf virus, *Sitobion avenae*, *Metopolophium dirhodum* 4617
secretions, larviposition, environmental factors, *Aphis craccivora* 7357
- Hong Kong**,
new species, taxonomy, morphology, *Magaselia cokeri* 7181
- Hoplia**,
geographical distribution, taxonomy, morphology, North Africa 1600
- Hoplia africana**,
geographical distribution, taxonomy, new subspecies, keys, North Africa 1600
- Hoplioclella decipiens**,
predator-prey interactions, *Pseudoplusia includens* 587
- Hopliophorella grandjeana**,
new species, taxonomy, morphology, Brazil 3971
- Hopliophorella kulczynski**,
new species, taxonomy, morphology, Brazil 3971
- Hordeum**,
stored products, infestation, pests, *Rhyzopertha dominica* 2257
- Hordeum vulgare**,
infestation, pest resistance, host plants, *Sitophilus oryzae* 7742
- Horizontal distribution**,
interspecific relationships, habitat, *Aedes triseriatus* 4482
oviposition, *Elasmopalpus lignosellus* 1139
soil, parasites, *Steinernema kraussei*, *Cephalcia abietis* 9173
- Hormones**,
amino acid sequence, Insecta 969
assays, ecdysone synthesis, neurosecretion cells, *Manduca sexta* 3343
biosynthesis, respiratory pigments, fat body, biochemical analysis, *Blaberus discoidalis* 1774
brain, bioassays, indicator species, *Philosamia ricini*, *Bombyx mori* 7330
brain, ovary development, juvenile hormones, *Aedes aegypti* 3488
control, protein biosynthesis, testes, *Tenebrio molitor* 386
corpora allata regulation, *Diplotera punctata* 3494
developmental stages, carbon dioxide effects on, *Locusta migratoria cinerascens* 3341
diapause, conferences, Insecta 3959
diapause effects on, *Gryllus campestris* 1099
diapause eggs, *Bombyx* 2678
 β -ecdysone, diapause, activation, *Calliphora vicina* 6639
 β -ecdysone, effects on physiology, foliivores, *Carausius morosus* 4263
ecdysteroids, hemolymph, molting, instars, *Mamestra brassicae* 7327
ecdysterone, effects on gene expression, LSP-2 gene, fat body, *Drosophila melanogaster* 5482
ecdysterone, effects on vitellogenesis, oogenesis, *Aedes aegypti* 5088
effects on cuticle physical properties, molting, *Schistocerca gregaria* 2517
effects on diapause, pupae, *Heliothis punctiger* 2679
effects on diapause termination, *Hyalophora cecropia* 3480
effects on egg production, parthenogenesis, *Solenopsis invicta* 1888
effects on lipid biosynthesis, fat body, *Glossina morsitans* 1751
effects on ovulation, *Glossina morsitans* 388
effects on vitellogenesis, *Aedes aegypti* 3491
effects on vitellogenesis regulation, *Drosophila* 5095
effects on vitellogenesis, *Rhodnius prolixus* 3513
environmental effects, Malpighian tubules, secretion, *Locusta* 2613
enzymatic activity, fat body, calcium effects on, *Periplaneta americana* 1759
hemolymph, chemical composition, effects on immobilization, *Sarcophaga bullata* 234
20-hydroxyecdysone, effects on host searching behavior, oviposition, *Aedes aegypti* 5875
5-hydroxytryptamine, proctolin: effects on, smooth muscles, contraction, reproductive organs, *Tabanus proximus* 965
hyperimmune hormone, pesticides (organochlorine), pesticides (organophosphorus), corpora cardiaca, *Locusta migratoria* 5787
interaction effects on cuticle molting, *Manduca sexta* 3493
juvenile hormones, diapause, molting, *Leptopygma pomonella* 1119
juvenoids, effects on embryogenesis, *Earias fabia* 5828
larviposition, *Glossina fuscipes* 3496
lipid metabolism, proline synthesis, fat body, *Glossina morsitans* 8089
melanization, coloration, *Leucana separata* 1360
metabolism, diapause, eggs, *Bombyx mori* 3474
metabolism, diapause, eggs, *Bombyx mori* 3474
molting, binding, vitellin eggs, *Locusta migratoria* 3515
molting, bioaccumulation, steroids, ovaries, *Bombyx mori* 210
molting, development, *Rhodnius prolixus* 5002
molting, diets, effects on development, *Musca domestica* 7463
molting, ecdysone analogs, biological activity, *Culex* 5003
molting, embryogenesis, diapause, *Bombyx mori* 3487
molting, integument structure, nymphs, *Onthodorus moubaia* 3340
molting, larvae, characterization, *Onopeltus fasciatus* 2582
molting, metamorphosis, developmental stages, *Manduca sexta* 967
molting, ovariiparity, embryogenesis, morphology, *Nauphoeta cinerea* 3514
molting, plasma levels, development, *Locusta migratoria cinerascens* 4163
molting, prothoracic II, development, larvae, *Rhodnius prolixus* 1882
molting, radioimmunoassay, developmental stages, *Choleva angustata* 205
molting, radioimmunoassay, larvae, *Sarcophaga bullata* 2717
molting, role, coloration, developmental stages, *Sarcophaga bullata* 3361
molting, vitellogenesis, oogenesis, *Anopheles stephensi* 3511
molting, 20-hydroxy-ecdysone, protein biosynthesis, vitellogenin, males, *Sarcophaga bullata* 3367
neuroendocrine system, oogenesis, *Aedes aegypti*, *Aedes taeniorhynchus* 5832
neurophysiology, octopamine, reviews, *Insecta* 4127
neurosecretions, neuroendocrine system, *Periplaneta americana* 5004
oogenesis, females, starvation effects on, *Labidura riparia* 966
prothoracicotropic hormone, larvae, pupae, development, circadian rhythms, *Samia cynthia ricini* 3466
purification, characterization, *Manduca sexta* 2588
release, pesticides, chlordimeform, desmethyldichlorideform, *Locusta migratoria* 4784
role, molting, larvae, *Lepidoptera* 2691
vitellogenesis, blood meals, *Culex* 5083
- Horticulture**,
pest control, environment management, *Insecta* 3726
pest control, insecticides, *Saundersia coffeae* 3792
pest control, weed control, environment management, *Insecta* 3958
pest resistance, *Impatiens*, *Tetranychus urticae* 5199
pests, integrated control, New Zealand 6082
pests, surveys, *Insecta*, Denmark 5308
urban environments, environment management, pest control, *Insecta* 3727
weed control effects on, pest control, environment management, *Insecta* 3728
- Host plants**,
abscission, leaves, mortality, herbivores, *Insecta* 5240
abundance, association, *Insecta*, *Kochia prostrata* 4392
abundance, *Auchenorrhyncha*, Egypt 6950
abundance, population levels, estimation methodology, *Aphis eugeniae* 2489
abundance, seasonal variations, population levels, *Myzus persicae*, USA, Washington 598
aggregation, life cycle, *Paryphes blandus*, *Anguria warszewiczii*, Costa Rica 7553
air pollution effects on growth, development, *Phaseolus vulgaris*, *Epilachna varvates* 2153
aldrin epoxidase, induction, microsomes, *Spodoptera frugiperda* 5712
alkaloids, tolerance, *Drosophila melanogaster*, *Lophocarenum scottii* 4389
antifeedants, *Warburgia*, *Spodoptera exempta*, *Spodoptera littoralis* 2842
anoxia, feeding effects on, *Schizaphis graminum* 2054
apiculture, production, land use effects on, USA, Georgia 6179
artificial diets, development, fecundity, *Spodoptera frugiperda* 6169
Asclepias syriaca predation, food organisms biomass, *Misumenella* 457
association, abundance, *Papilionidea*, USA, Illinois 1952
association, *Aztec alfalfa*, *Cecropia lyratoloba* nana 4403
association, *Convolvulus sepium*, *Insecta*, Canada, Ontario 6794

host plants, (continued)

- association, evolution, *Bytneria aculeata*, *Pheidole*, *Crematogaster* 7554.
life history, *Eupteryx notata* 5886.
association, oviposition, adaptations, *Callosobruchus maculatus* 1248.
association, pests, *Anthergona*, *Acnochaeta*, India 4557.
association, phenology, *Ceanothus crassifolius*, *Mindae* 5953.
attractancy, γ radiation effects on, *Scolytus multistriatus* 8968.
attractancy, pollination, *Helianthus annuus*, *Insecta* 7762.
attractants, biochemical analysis, *Allium porrum*, *Acrolepiopsis assectella* 1240.
efficacy, *Hylemyia antiqua* 515.
attractants, oviposition, *Papilio* 3594.
attractants, repellents, host searching behavior, *Cavarella segopodi* 2056.
attraction, species composition, *Arctidae*, *Ctenuchidae*, *Donainae*, *Heliotropium*, Kenya 5962.
bean yellow mosaic virus, disease transmission, *Vicia faba*, *Aphis fabae*, *Myzus persicae* 3707.
biochemical characteristics, pests infestation effects on, *Aphis fabae*, *Beta vulgaris* 7781.
biomimics, *Ophiomyia simplex*, *Asparagus officinalis*, USA, Massachusetts 6134.
biomimics, oviposition, *Wyeomyia vanduzeei*, *Tillandsia utriculata* 2075.
biomimics, *Phloeotinus liminaris*, *Prunus serotina* 9115.
biomimics, *Saissetia hemisphaerica*, Cuba 9095.
breeding sites, development, pests, *Scolytus multistriatus*, *Ulmus procera* 6195.
breeding success, genetics, inheritance, genes, *Pisum sativum*, *Stiophilus oryzae* 1489.
Callitris, *Pocillocooccus longilobus*, Australia 827.
Callosobruchus, *Caryedon*, *Acanthoscelides*, *Zabrotes* 5641.
cardenolide, effects on oviposition, larvae survival, *Asclepias humistrata*, *Dunus plexipus*, USA, Florida 9154.
Cardella lewisiana, *Ambrosia dumosa*, USA, California 6722.
chemical composition effects on growth, *Hispinae* 615.
chemical composition, effects on larvae mortality, *Dacus oleae* 7607.
chemical composition, effects on larval survival, *Pieris rapae*, *Paropsis atomaria* 7567.
chemical composition, effects on population dynamics, larvae, *Aedes triseriatus* 6818.
chemical composition, effects on survival, fecundity, *Brevicoryne brassicae* 7559.
chemical composition, pests effects on, *Acyrtophorus*, *Medicago sativa* 540.
chemical composition, tannins, herbivores, reviews, *Insecta* 6010.
chemical perception, egg laying, *Acrolepiopsis assectella* 1158.
chemical stimuli, effects on oogenesis, *Acanthoscelides obtectus* 5824.
Chrysomelidae, USA, Missouri 4740.
classification, morphology, *Podopneae* 3251.
clothes, host-parasite interactions, herbivores, *Solidago*, *Uroleucon caligatum* 5963.
cloves, pest resistance, *Panonychus ulmi*, *Malus domestica* 5312.
coevolution, habitat selection, community structure, speciation, *Cruciferae*, *Anthocharis cardamines* 8348.
colonization, aggregation, sex pheromone biosynthesis, *Ips paraconfusus* 3539.
colonization, effects on weeds, *Myzus persicae* 533.
competition, oviposition deterrents, pheromones, *Hylemyia* 5856.
crop fields, *Heteroptera*, *Sorghum vulgare* 2097.
crop fields, larvae feeding behavior, *Wiseana*, *Trifolium repens* 3568.
crop yield, insecticides effects on, *Bemisia tabaci* 3705.
crops, *Loxagrostis albicoma*, North America 6156.
Cruceiferae, larvae, *Entomoscillus americana* 2094.
Cynodon dactylon, effects on, growth, development, *Spodoptera frugiperda* 556.
damage, *Insecta*, *Metrosideros collina* polymorpha, USA, Hawaii 5202.
damage, larvae feeding behavior effects on, *Heliothis virescens*, *Gossypium hirsutum* 721.
damage, life history, *Eura amerinae* 9088.
damage, *Margodesia desmieri*, Ivory Coast 1791.
damage, new records, *Oncelia*, *Panacra maliare* 1242.
damage, pest control, *Phaigalia palustris*, *Purshia tridentata*, USA, Utah 3025.
damage, *Pinus resinosa*, *Pinus boerneri*, *Pinus coloradensis*, USA, New England 8697.
damage, population levels estimation, *Heliothis virescens*, *Heliothis zea*, *Nicotiana tabacum* 8356.
damage, weed control, *Longitarsus alabineus*, *Heliotropium europaeum*, Australia 2950.
damage, yield, *Teleogryllus commodus*, *Trifolium repens*, *Lolium perenne* 2254.
defense mechanisms, L-canavanine, effects on midgut epithelium, *Manduca sexta* 4391.
defense mechanisms, pesticides, cross-resistance, *Tetranychus urticae* 6284.
desoilation, pests, *Datana integerrima*, *Juglans nigra*, USA, Illinois 7725.
desoilation, *Pubilia concava* effects on, infestation, *Tritaboda* 2073.
detection, olfaction, larvae, *Diabrotica virgifera virgifera* 4413.
deterrents, larvae feeding behavior, *Pristiphora erichsonii* 623.
development, *Ollarianus balli*, Jamaica 5892.
developmental stages, *Armiliariella mellea*, *Oxyopus lateralis* 4931.
developmental stages, assimilation, *Pyeria sinica*, Japan 981.
developmental stages, effects on population growth, phenotypes, alateiform nymphs, *Scymnus*, *avenae* 6023.
diel activity, vertical migrations, spatial distribution, *Acyrtosiphon gossypii* 6717.
diets, effects on fecundity, survival, *Diaphania nitens* 1890.
diets, life cycle, *Cotias alexandria*, USA, Rocky Mts. 7517.
diets, life history, *Myliocerus undecimpustulatus maculosus* 5151.
diets, *Scymnoides lividigaster*, *Leptotheca galbula*, habitat utilization, Australia 6049.
dispersal, capture-recapture studies, larvae, *Lymantria dispar* 6813.
distribution, population density, larvae, *Holotrichia consanguinea* 5364.
distribution, pupae, *Hypocysta adiantae*, *Onis arcuatus* 1244.
distribution, *Tetranychus cinnabarinus*, *Codiaeum variegatum* 2084.
ecological distribution, *Drosophila fima* 1628.
efficacy effect, oviposition, *Anthocharis cardamines* 4290.
effects on development, pest control, parasites, *Encarsia formosa*, *Trialeurodes vaporariorum* 7726.
effects on development, reproduction, *Dendroctonus ponderosa*, *Pinus* 5975.
effects on fecundity, longevity, *Helulla undalis* 6806.
effects on fecundity, *Otiorynchus sulcatus* 5340.
effects on growth rate, *Myzus persicae* 2071.
effects on kairomones, parasitoids, *Microplitis croceipes*, *Heliothis zea* 2824.
effects on larvae survival, *Epilachna variegata* 6005.
effects on oviposition mating behavior, *Diorcyctia amatella* 1914.
effects on pests natural enemies, *Myzus persicae* 723.

Host plants, (continued)

- effects on pheromones biosynthesis, *Ips paraconfusus* 1786.
effects on pigmentation, polymorphism, larvae, *Choristoneura fumiferana* 5643.
effects on species richness, abundance, *Lepidoptera*, Finland 9162.
effects on webs, silk, *Tetranychus cinnabarinus* 2841.
eggs, parasites distribution, *Lygus*, *Nabis*, *Spissistulus festinus* 8384.
emergence, overwintering, life cycle, *Protoplas*, *Tetralopha euphemiae*, USA, Texas 5961.
environmental factors, honeydew, secretions, larviposition, *Aphis craccivora* 7357.
environmental stress, effects on survival, reproduction, *Medicago sativa*, *Therioaphis maculata* 9168.
evolution, cladistic analysis, geographical distribution, *Gondwanaland*, *Pismatidae* 2352.
extracts, effects on feeding behavior, *Dendroctonus frontalis*, *Pinus taeda* 1941.
extracts, growth retardation, *Lycopersicon esculentum*, *Heliothis zea* 2083.
extracts, pest resistance, *Vigna mungo*, *Lens culinaris*, *Callosobruchus chinensis* 7766.
exudates, feeding, *Saissetia*, *Pityrogramma*, Germany, Fed. Rep., Darmstadt 1207.
fatty acids, effects on growth, *Pectinophora gossypiella*, *Heliothis zea*, *Heliothis virescens* 4414.
feeding behavior deterrents, *Baccharis halimifolia*, *Triphaba bacharidis* 5956.
feeding behavior deterrents, *Pinus sylvestris*, *Neodipron sertifer* 5952.
feeding behavior, food preferences, *Loxostege commixtalis* 1994.
feeding behavior, habitat, dunes, *Brachycerus spinulosus*, Egypt 7591.
feeding behavior, larvae, *Heliothis*, *Gossypium* 6123.
feeding behavior, saline environments, *Clanoneurum americanum*, *Suaeda linearis* 5904.
feeding behavior, *Stephanitis pyrioides* 2800.
feeding behavior, visual stimuli, light, *Synanthedon pictipes* 5929.
feeding, *Berytidae* 8355.
feeding damage, pests, *Myzus persicae*, *Solanum tuberosum* 8543.
feeding damage, regeneration, *Nymphoides cristatum*, *Insecta* 6801.
feeding, larvae, *Galgula partita*, *Oxalis* 7560.
feeding, *Peridromus*, *Drosophila megagenys*, *Drosophila notha*, Australia 3590.
feeding, viruses vectors, methodology, cages, *Aphididae* 7253.
flowering effects on, infestation, *Gossypium*, *Pectinophora gossypiella* 3765.
flowering, life history adaptations, *Schinia mitis*, *Pyrrhopappus* 6790.
flowering phenology, pollination, community structure, *Bombus* 1258.
flowering phenology, pollination, wind, *Insecta*, USA, Missouri 2047.
flowering, population genetics, reproductive strategy, pollination, *Insecta* 3592.
flowers, feeding, *Pteridae*, *Streptanthus*, USA, California 8340.
flowers, foraging behavior, interspecific relationships, *Bombus*, *Syrphidae* 2115.
foliage, effects on dispersal, *Lymantria dispar* 5980.
food consumption, growth rate, feeding behavior, *Hyalophora cecropia* 5970.
food plants, suitability, effects on, survival, development, *Nezara viridula* 361.
food preferences, associations, cannibalism, larvae, *Dacnusa obliqua* 1209.
food preferences, chemotaxis, *Choristoneura fumiferana* 5161.
food preferences, *Schistocerca gregaria*, *Peridromus* 1245.
food quality, larvae mortality, *Zanthoxylum alianthoides*, *Papilio xuthus* 7563.
food selection, geographical variations, sympatric, speciation, *Apidae* 1544.
foraging behavior, food sources, niche pattern, *Bombus terrestris*, *Bombus lapidarius* 6835.
fossils, miocene, leaf miners, *Mahonia reticulata* 4751.
furanocoumarins, xanthotoxin, growth, *Papilio polytes* 5968.
galls, abundance, *Tonnothrips kosszarabii*, *Quercus emoryi* 4422.
galls, association, *Scymnoida*, *Betula* 7565.
galls, emergence, *Urophora cardui*, *Cirsium arvense* 8354.
galls formation, *Insecta*, Sweden 7558.
galls, infestation, *Phytomyza transiens*, *Zizyphus jujuba*, India 6798.
galls, new species, *Szygymna cumini*, *Fergusonia szzygmyi*, India 4831.
galls, new species, *Tetranychus cecidobroter*, *Atriplex*, USA, California 7963.
galls, niche pattern, *Aciurina*, *Chrysodoma* 6792.
galls, *Paradiplosis tinnis*, *Abies balsamea* 6805.
galls resistance, *Picea excelsa*, *Chermes abietis* 7562.
galls, collections, *Insecta*, Sweden 3599.
genetic analysis, pest resistance, *Nilaparvata lugens*, *Oryza sativa*, Japan 8462.
genotypes, infestation, *Sorghum bicolor*, *Spodoptera frugiperda* 6127.
genotypes, olfactory preferences, *Gossypium*, *Earias vitella* 9080.
genotypes, oviposition, *Lygus hesperus* 1903.
geographical distribution, *Auchenorhyncha*, Turkey 4735.
geographical distribution, ecological distribution, *Cerambycidae*, USA, Texas 1944.
geographical distribution, new records, *Phyllocolpa violae*, Egypt 7103.
geographical distribution, new records, USA, Missouri, *Cerambycidae* 8698.
geographical distribution, reviews, *Uroleucon* 6808.
Gossypium hirsutum, pests, control programs, biological control, chemical control, *Earias*, *Pectinophora gossypiella* 1444.
growth, fecundity, survival, *Acyrtosiphon kondoi*, *Medicago sativa* 6944.
growth, feeding effects on, *Monella carylla*, *Carya pecan* 2091.
growth, infestation effects on, *Eriophyes medicaginis*, *Medicago sativa* 2854.
growth, infestation, nymphs, *Magicada*, *Malus* 6126.
growth, *Oryza sativa*, biotypes effects on, *Nilaparvata lugens* 1288.
growth, photosynthesis, infestation effects on, *Tetranychus urticae*, *Fragaria vesca* 6163.
habitat, abundance, *Mompha nodicollae*, British Isles 5882.
Hamelis virginiana, *Pseudanthonomus ham*, USA, East 9097.
herbivores, ecological distribution, reviews, *Xanthium spinosum*, *Xanthum strumarum*, *Insecta*, World 8357.
herbivory susceptibility, vegetation patterns effects on, *Aristolochia reticulata*, *Battus philenor* 2072.
host preferences, *Aulacophora foveicollis* 9106.
host preferences, feeding behavior, oviposition, dispersion, *Scaphytopius acutus*, *Prunus persica*, *Trifolium pratense* 526.
host preferences, feeding bioassays, chemical stimuli, *Pissodes strobi* 5162.
host preferences, host selection, sensory stimuli, herbivores, *Insecta* 8070.
host preferences, oviposition, *Apanteles flavipes* 2979.
host preferences, oviposition, *Brassica*, Sweden 4401.
host preferences, oviposition, *Euphydryas editha* 5955.
host preferences, reviews, *Helianthus annuus*, *Insecta* 4390.
host preferences, *Vaccinium*, *Rhagoletis mendax* 3639.
host preferences, varieties, *Corypha cephalonica*, *Triticum aestivum* 7674.
host range, historical account, *Umbelliferae*, *Psila rosea* 8341.
host searching behavior, temperature effects on, *Cydia pomonella* 8277.
host selection, chemical properties, phenols, *Populus angustifolia*, *Pemphigus betae* 8345.

Subject Index

Host plants, (continued)

host-parasite interactions, feeding physiology, reviews, Nilaparvata lugens 5675
infestation, abundance, Phytomyza orobanchiae, Orobanche crenata, Egypt 6812
infestation, Artemisia californica, Peranthus vittatus, USA, California, San Diego Co 6810
infestation, Cirsum canescens, Corythocha disticta, USA, Nebraska 9163
infestation, damage, Cirsum canescens, Corythocha disticta, USA, Nebraska 5198
infestation, damage, Pinus clausa, Systena marginalis, USA, Florida 5168
infestation effects on, damage, Diatraea grandioevella 3822
infestation, feeding effects on, Forcipata loca, Festuca arundinacea 2086
infestation, flowering phenology effects on, Frumeta arundinella, Solanum carolinense 2839
infestation, life cycle, Empoasca kerr, Cymopsis tetragonoloba, Pakistan 9161
infestation, phenology, Smicronyx, Cuscuta, Pakistan 9157
infestation, Phymata wolffii, Daucus carota, Canada, Ontario 6796
insecticides effects on feeding, food utilization, Achaea janata, Ricinus communis 7412
insecticides, susceptibility, Spodoptera frugiperda 3010
interspecific relationships, Canna edulis, Calpodex ethiols, Mexico, Sinaloa, Mazatlan 5967
interspecific relationships, sexual reproduction, Endothenia daeckiana, Sarracenia purpurea, Canada, Quebec 4328
introduced species, effects on oviposition, feeding behavior, Cruciferae, Pieridae 2048
Jalysus spinosus, Jalysus wickhami 3947
larvae, feeding behavior, new species, Dichrorampha sapodilla, Dichrorampha manilkara, USA, Florida 1660
larvae metabolites effects on, characterization, Cylas formicarius 951
larvae, movements, Hippodamia convergens 5957
larviposition, host-parasite interactions, chemical stimuli, Lixophaga diatraeae, Diatraea saccharalis 5941
leaves damage, feeding, Tetranychus urticae 7764
leaves, feeding behavior effects on, Eriophis cladophthirus, Solanum dulcamara 1236
leaves, feeding, food conversion, Niopsis brassicae 6746
leaves, morphology, effects on feeding behavior, Adalia bipunctata 5959
Lecanium scabrum, community composition, Mycetophila 4439
life cycle, Coccophaps sanguinarius, Lygocoris vitticollis, USA, Pennsylvania 5902
life cycle, Heliothis zea, Heliothis virescens, USA, Mississippi 2085
life cycle, Hypopolis nubiliosus, Amaranthus caudatus, Egypt 6730
life cycle, mortality, Phyllonorycter messaniella, Australia 3554
life cycle, pest control, integrated control, Rhyacionia frustrana, USA, California 5318
life history, flight activity, Hemileuca croci 7508
life history, Hypnus bertrandi, Portulaca oleraceae 6728
life history, pest control, Holotrichia consanguinea, India, Punjab 5363
life history, Portulaca oleraceae, Baris arctibasis 499
lipids, deterrents, pest resistance, Sorghum bicolor, Locusta migratoria migratoriosus 5290
Lygosominae, parasites, species composition, Coccocela, Africa 5206
males feeding behavior, new species, Heliotropium, Gabonia gabriella 3987
Medicago, effects on activity patterns, Hypera posica 2055
microclimate, spatial distribution, pests, population levels, Aonidiella aurantii, Greece, Crete 1256
molting inhibitors, Lepidoptera, Ajuga remota 4274
morphology, keys, taxonomy, Kaltenbachella 7197
morphology, taxonomy, reviews, Gelechiidae 4896
nectar, competition, Phaenothrips, Trigonon farnacoides, Panama 4409
nesting behavior, Coleoptera, Formicidae, Cibadium microcephalus 4396
new records, Achaea janata, Archis hyopogea 6800
new records, Agromyzidae, Cuba 8784
new records, Aphididae, Canada, British Columbia 5524
new records, pests, Aegyptiola nomus, Buchloe dactyloides 2066
new records, pests, Schizotetranychus, Crotalaria spectabilis 7675
new records, Phyllis minima, Oligonychus coffeae 9151
new records, Tetranychus neocaledonicus, Tagetes erecta, India, Punjab 6804
new species, Anarsia achrasella, Achras zapota, India 2465
new species, Chalcididae, Mascarene Is., Reunion I. 4877
new species, Hypogococcus pungens, Alternanthera pungens, Argentina 1639
new species, morphology, Calamomyia alterniflora, Spartina alterniflora, North America 3204
new species, taxonomy, morphology, Latigenia orzabensis, Impatiens americanum, Canada 4863
new subspecies, taxonomy, morphology, Papilio andra phyllisae, Papilio andra panamintensis, USA, California 7223
nuclear polyhedrosis virus transmission, pest control, Podisus maculiventris, Trichoplia 3181
nutrient availability, effects on development, Pieris rapae, Spodoptera eridania, Brassica nigra 5960
nutritional status, effects on wings polymorphism, Nilaparvata lugens 81
nymphs, development, feeding, Nicotiana glauca, Coumaelena externa, USA, California 8290
nymphs, distribution, aggregation, Hibiscus esculentus okra, Amrasca biguttula biguttula 5298
odor, orientation, Paila roseae, Daucus carota 8264
olfactory stimuli, effects on phototaxis suppression, Bombyx mori 3300
orientation, chemotaxis, sense organs, Bary, Hylemyia antiqua 913
orientation, feeding behavior, gustatory stimuli, Dendroctonus ponderosae 4303
overwintering, survival, Lygus 6012
oviposition, Apogonella grossa, Brazil 6608
oviposition, development, Balanogaster kolae, Cola acuminata, Cola verticillata 8352
oviposition, fecundity, Atherigona soccata 5842
oviposition, habitat preferences, Euphychia libye 6660
oviposition, habitat preferences, Maruca testulalis, Vigna unguiculata 8349
oviposition, Heliothis zea, Arachis hypogaea 6106
oviposition, host searching behavior, host preferences, Colias philodice eriphyle 6682
oviposition, larvae survival, Papilio glaucus canadensis 3595
oviposition, Pectinophora gossypiella, Gossypium 6157
oviposition, pests, Diabrotica virgifera, Diabrotica longicornis, Zea mays 6966
oviposition, reproductive behavior, Chilo partellus, Zea mays 7492
oviposition, reproductive behavior, Hesperia ottoe, Echinacea pallida 8246
oviposition, salt marshes, Hyalomira daeckei, USA, New Jersey Coast 6710
oviposition, site preferences, Heliothis zea, Lycopersicon esculentum 6166

Host plants, (continued)

oviposition, site selection, Orius insidiosus, Nabis roseipennis, Nabis americanus 9069
oviposition, site selection, Orius tristicolor 1894
oviposition, stimulants, Keiferia lycopersicella, Lycopersicon esculentum 4402
oviposition, substrate preferences, Aphidoletes aphidimyza 6679
oviposition, substrate preferences, Sorghum vulgare, Atherigona soccata 7483
oviposition, survival, larvae, Asclepias humistrata, Danus plexippus 5958
parasites, emergence, Metzenra apnella 5140
parasites, new species, Eurytoma 4878
penetration, mouthparts, lycera seychellorum, Aldabra Atoll 4395
pest attack, ethinol, Picea, Dendroctonus rufipennis 2843
pest control, avoidance behavior, alarm pheromone, Aphididae 7337
pest control, Azadirachta indica extracts, repellents, Amrasca moorei, Vigna santomolia 6923
pest control, insecticides, Aphis nerii, Nerium oleander 722
pest control, insecticides efficacy, Aphis gossypii, Amrasca biguttula biguttula, Abelmoschus esculentus 7683
pest control, oils, Bruchus chinensis, Phaseolus aureus 6929
pest control, pesticides, Insecta, Abelmoschus esculentus 7706
pest outbreaks, Amplex canescens, Tenebrio nua, USA, Arizona 6795
pest outbreaks, fruit trees, Citrus, Araceae fasciculatus, USA, Florida 4613
pest outbreaks, infestation, Macrosiphum albifrons, Lupinus, British Isles, England, New Gardens 7744
pest outbreaks, population dynamics, Cicer arietinum, Helicoverpa armigera, India, Jabalpur 769
pest resistance, anthobiosis, Medicago sativa, Therioaphis trifolii 7774
pest resistance, anthobiosis, Sorghum vulgare, Atherigona soccata 7751
pest resistance, Avena sativa, Schizaphis graminum 914
pest resistance, Beta vulgaris, Tetanoplas myopaeformis 9350
pest resistance, biochemical characteristics, Sorghum bicolor, Atherigona soccata 7740
pest resistance, breeding, Triticum, Schizaphis graminum 3717
pest resistance, comparison, Solanum berthaultii, Solanum tuberosum, Leptinotarsa decemlineata 8548
pest resistance, cultivars, Insecta, Vigna unguiculata 8522
pest resistance, damage, Acyrthosiphon, Medicago sativa 2256
pest resistance, damage, Empoasca kraemeri, Phaseolus lunatus 8459
pest resistance, detection methodology, Ipomoea batatas, Diabrotica balteata 7719
pest resistance, detection methodology, Malus, Enosoma lanigerum 2962
pest resistance, developmental stages, Zea mays, Ostrinia nubilalis, Agrotis ipsilon 6914
pest resistance, diets, genetic factors, Ostrinia nubilalis, Zea mays 3780
pest resistance, effects on development, Triticum aestivum, Metopolophium dirhodum 2840
pest resistance, effects on feeding behavior, Heliothis zea, Zea mays 2044
pest resistance, effects on growth, development, Heliothis virescens 6191
pest resistance, effects on population levels, Zea mays, Spodoptera frugiperda 5395
pest resistance, Empoasca abrupta 2090
pest resistance, feeding behavior, Schizaphis graminum, Sorghum bicolor 6096
pest resistance, feeding behavior, Zea mays, Heliothis zea 9318
pest resistance, feeding deterrents, Sorghum bicolor, Schizaphis graminum 5294
pest resistance, fungi, Dendroctonus ponderosae, Pinus contorta latifolia 6186
pest resistance, galls, breeding, Oriza sativa, Orsolia oryzae 5407
pest resistance, genetic analysis, Oriza sativa, Scirpella fusifera 9280
pest resistance, genetics, Abelmoschus esculentus, Amrasca biguttula biguttula 6934
pest resistance, genotypes, Eleusine coracana, Sesania inferens, Miloceris maculatus 5408
pest resistance, genotypes, Sorghum, Schizaphis graminum 6153
pest resistance, genotypes, Zea mays, Spodoptera eridania 8518
pest resistance, Glycine max, Nezara viridula 9353
pest resistance, Gossypium arboreum, Earias, Pectinophora gossypiella 8441
pest resistance, Gossypium hirsutum, Heliothis virescens 9352
pest resistance, herbivory, Atherigona 4566
pest resistance, hybrids, Zea mays, Pyrausta nilei 3716
pest resistance, infestation methodology, Heliothis virescens, Gossypium hirsutum 8868
pest resistance, infestation, Sitophilus oryzae, Hordeum vulgare 7742
pest resistance, inheritance, genetic factors, Pennisetum americanum, Blissus leucopus leucopus 8460
pest resistance, Ipomoea batatas, Cylas formicarius elegansulii 6916
pest resistance, larvae enzymes, digestive tract, Atherigona soccata 4153
pest resistance, larvae survival, Sitona 6902
pest resistance, Lolium perenne, Hyperodes bonariensis 6799
pest resistance, methodology, Nilaparvata lugens, Zea mays 8537
pest resistance, Oligonychus pratensis, Sorghum bicolor 8549
pest resistance, Oriza sativa, Nephotettix cincticeps 3004
pest resistance, Oriza sativa, Nephotettix cincticeps 3589
pest resistance, Oriza sativa, Nilaparvata lugens 5381
pest resistance, pest control, Ipomoea batatas, Phyllophaga epilida 6936
pest resistance, photoperiod, light intensity effect on, Lycopersicon hirsutum, Manduca sexta 9340
pest resistance, Pylla pyrrola, Pyrus ussuriensis x Pyrus communis 3720
pest resistance, screening, Solanum tuberosum, Phthorimaea operculella 3824
pest resistance, screening, Vigna unguiculata, Maruca testulalis 3721
pest resistance, seedlings, morphology role, Sorghum bicolor, Atherigona varia soccata 7719
pest resistance, Spodoptera frugiperda, Eremochola ophiuroides 8539
pest resistance, susceptibility, Sitobion avenae, Triticum aestivum 2986
pest resistance, Trialeurodes vaporariorum, Lycopersicon hirsutum, Solanum pennellii 9283
pest resistance, varieties, hybrids, Blissus insularis, Stenographum secundatum 8556
pest resistance, varieties, Leucanodes orbonalis, Solanum melongena 7676
pest resistance, varieties, Nilaparvata lugens, Oriza sativa 6197
pest resistance, Vitis, Daktulosphaira vitifoliae 9289
pest resistance, water stress effects on, Medicago sativa, Therioaphis maculata 5324
pest resistance, Zea mays, Tribolium castaneum 6931
pesticide residues, pollen, oecar, nontarget organisms, Megachile rotundata, Medicago sativa 8395
pests, damage, Abies fraseri, Mindarus abietinus, USA, North Carolina 4336

Host plants. (continued)

pests, damage, citrus groves, *Aracoccus fasciculatus*, USA, Florida 8565.
 pests, damage, susceptibility, *Panicum miliacium*, *Anthergona varia* soccata 7704
 pests development, varieties, *Amrasca devastans*, *Earias vittella*, Gossypium 7791
 pests, ecological distribution, Scolytidae, Platypodidae, South America 7722
 pests effects on chemical composition, *Medicago sativa*, *Agromyza frontella* 9296
 pests, effects on leaf fall, photosynthesis, *Pyrus communis*, *Bucculatrix pyrivorella* 7745
 pests, feeding behavior, ornamentals, *Athergona soccata* 4563
 pests, galls, Solanaceae, *Euphyas cladophthirus* 6910
 pests, *Hibiscus cannabinus*, *Podagracea punctellus*, Sudan 2852
 pests, new records, *Bemisia hancocki*, *Laurus nobilis*, British Isles 2977
 pests, *Piper nigrum*, *Longiaris nigripennis*, *Cydia beximoda*, *Liothrips karnyi*, India, Kerala 6946
 pests population dynamics, Brassica, *Lipys erysimi*, India 7776
 pests, population regulation, predators, *Aphis craccivora*, *Vigna sinensis* 9188
 pests, soil distribution, *Smicronyx fulvus*, *Helanthus annus* 6932
 pests, spatial distribution, *Brevicoryne brassicae*, *Myzus persicae*, USA, California, Orange Co 8358
 pests, spatial distribution, *Helanthus annuus*, *Smicronyx fulvus* 6091
 pests spatial distribution, *Helanthus annuus*, *Smicronyx fulvus* 9309
 pests susceptibility, sulfur dioxide effects on, *Phaseolus vulgaris*, *Epilachna varivestis* 6782
 pests, winter, development, fecundity, *Myzus persicae*, India, Simla 7746
 phenology, host-parasite interactions, population levels, *Ortus insidiosus* 1253
 phenology, *Opilia amantacea*, *Dacus opiliae*, Australia 5626
 phenology, parasitoids, population decline, *Xanthotera politum*, USA, New Jersey 2034
 pheromones precursors, effects on biosynthesis, *Ips paraconfusus* 1784
 pheromones, trapping, *Trypodendron* 701
 physical properties effects on mortality, *Gossypium hirsutum*, *Anthonomus grandis* 6115
Polyphaga, pests landing behavior, *Ips plastographus maritimus*, USA, California 1739
 pollination, association, *Formica schaufussi*, *Diamorpha smallii* 1251
 pollination, Diptera, *Asarum caudatum* 6786
 pollination, flowering, Insecta, *Lomatium* 6785
 pollination, foraging behavior, *Bombus* 2050
 pollination, habitat, *Zenobia*, *Bombus* 3598
 pollination, *Munaria greenlandica*, Diptera, Hymenoptera, USA, New Hampshire, Mount Washington 5974
 pollination, reproductive success, *Ficus glabrata*, *Aganidea* 2051
 pollination, surveys, Apoidea, USSR 789
 pollinators, symbiosis, *Ficus*, *Aganidea* 2848
 population density, effects on oviposition, survival, *Athergona soccata* 6104
 population dynamics, *Athergona*, Upper Volta 4431
 population dynamics, feeding, *Insecta* 9165
 population dynamics, gynoparae, *Prunus padus*, *Rhopalosiphum padi*, Finland 5226
 population dynamics, *Heliothis*, USA, Texas 6017
 population dynamics, pests, *Bemisia tabaci*, Jordan 7622
 population dynamics, *Sorghum arundinaceum*, *Athergona soccata*, Kenya 4432
 population genetics, genetic variance, *Penthida glyphopa*, *Eucalyptus marginata*, *Eucalyptus radi* 7875
 potato leaf roll virus, disease transmission, *Phyalis flondana*, *Myzus persicae*, *Macrosiphum euphorbiae* 3395
 predators effects on chemical composition, *Agromyza frontella*, *Medicago sativa* 552
 preferences, *Eriosema*, *Ribes*, *Ulmus* 8356
Prunus amygdali, infestation host plants damage, *Amyelois transistella* 2240
Prunus persicae, disease resistance, plum pox virus, disease transmission, *Myzus persicae*, *Myzus varians* 1259
Pseudotsuga menziesii, habitat, distribution, *Cnisia carrolli* 4471
Quercus laevis, life history, bionomics, *Brachys tessellatus*, USA, Southeast 1088
Quercus nigra, *Cameraria*, population density, population regulation 2134
 range extension, host-parasite interactions, *Catorhintha medica*, *Mirabilis nyctaginea*, USA, East Coast 4397
 range, geographical distribution, 10 species, pests, *Scitotrichus* 1261
 rearing methodology, pesticide resistance, *Metaseiulus occidentalis* 8863
 rearing methodology, *Pseudaulacaspis pentagona* 1693
 reproduction, herbivores, species composition, *Typhlocyba*, British Isles 5965
 reproduction, survival, *Rhopalosiphum padi*, *Prunus padus* 2838
 reproductive strategy, pollination, *Ceratostolen*, *Ficus* 6781
 resistance, antifedants, *Corchorus capsularis*, *Myllocerus discolor* 2851
 resistance, cultivars, pest control, *Medicago sativa*, *Acyrtosiphon kondoi*, *Acyrtosiphon pisum* 3801
 resistance, pests, *Cylas formicarius*, *Ipomoea batatas* 1233
 resistance, susceptibility, pests, bionomics, *Medicago sativa*, *Therioaphis trifolii* 7757
 resource partitioning, habitat, population ecology, *Muellerianella* 3633
 role, larvae development, *Anticarsia gemmatilis* 2067
 roots, ecological distribution, soil, Aphididae, India 5258
 seasonal variations, pests, dispersion, *Leucodorus ornabalis*, India, Sabour 7741
 seedlings, microorganisms, oviposition stimuli, *Hylemya antiqua* 5860
 seeds, abundance, survival, *Hamamelis virginiana*, *Pseudanthrenomus hamamelidis* 5969
 seeds dispersal, community structure, forests, *Formica* 3602
 settling behavior, Aphididae population density effects on, *Coccinella septempunctata* 2865
 settling behavior, flight activity, *Rhopalosiphum padi* 3562
 settling behavior, locomotor activity, *Aphis citricola*, *ovatus malisuctus* 1243
 site selection, oviposition, Insecta, *Lycopersicon esculentum* 2081
Solanum carolinense, *Frumenta nundinella*, USA, Virginia 4329
Sorghum bicolor, oviposition, eggs distribution, *Athergona soccata* 4288
 spatial distribution, aggregation, *Amrasca biguttula biguttula*, *Abelmoschus esculentus* 4529
 spatial distribution, *Aphis gossypii*, Central African Republic 2899
 spatial distribution, sampling methodology, *Triphlochipsa* n1 6107
 species composition, Insecta, *Convolvulus arvensis*, Egypt 6807
 species composition, Insecta, *Trifolium alexandrinum*, Egypt 6811
 species diversity, coevolution, Apoidea, North America 1564
 species lists, Issidae, Turkey 4737
 steroids, antifedants, *Epilachna varivestis* 2077
 strains, comparative studies, feeding behavior, *Nephotettix cincticeps* 2856

Host plants. (continued)

substrate preferences, oviposition, *Cajanus cajan*, *Melanogromyza obtusa* 6674
 substrate preferences, oviposition, *Callosobruchus chinensis*, *Callosobruchus maculatus* 7495
 substrate specificity, environmental effects, oviposition, *Sciridae*, Australia 1896
 susceptibility, cultivars, *Poa pratensis*, *Sphenophorus parvulus* 5327
 susceptibility, feeding, *Nephotettix virescens*, *Oryza sativa* 8569
 susceptibility, pests, Brassicaceae, *Brevicoryne brassicae* 9301
 susceptibility, pests, *Brevicoryne brassicae*, Brassicaceae 6085
 susceptibility, pests, cultivars, *Malus pumila*, *Lasepeyria pomonella* 5313
 susceptibility, pests, infestation, chemical control, *Manihot esculenta*, *Mononychellus caribbaeus* 1428
 susceptibility, pests, infestation, *Synanthedon pictipes* 7755
 susceptibility, pests, oviposition, ornamentals, *Chilo partellus* 7680
 susceptibility, pests, *Picea glauca*, *Pikonema alaskensis* 7785
 susceptibility, pests, *Solanum melongena*, *Leucodermis ornabalis* 7710
 susceptibility, pests, *Trogoderma granarium*, *Triticum* varieties 9304
 sweet potato feathery mottle virus transmission, *Aphis gossypii*, *Ipomoea setosa*, *Ipomoea* n1 3819
 symbiosis, nutrients, Cecropia, Formicidae 4398
 taxonomy, morphology, *Caryocheim*, Europe 4887
 toxicants, oviposition mistakes, larvae, development, *Papilio glaucus*, *Angelica atropurpurea* 8247
 toxins, diets, parasitoids, *Hypostrator exiguae*, *Heliothis zea* 3578
 trees, coevolution, herbivory, Insecta, British Isles 2846
 turnip mosaic virus infection, effects on pest resistance, Brassica rapa, *Myzus persicae*, *Brevicoryne brassicae* 3830
 Umbelliferae, abundance effects on species diversity, *Agromyza* 6789
 Umbelliferae, furanocoumarins, phototoxicity, herbivores, *Oecophoridae*, *Papilionidae*, USA, New York 2079
 Uromycladum tepperianum galls, species composition, *Lepidoptera*, *Acacia* 7557
 varieties, pest resistance, *Sorghum bicolor*, *Zea mays*, *Chilo partellus* 7732
 varieties, *Spodoptera litura*, pests, population growth, *Spodoptera litura*, *Arachis hypogaea* 6913
 viruses disease transmission, *deltamethrin* effects on, *Myzus persicae* 6954
 viruses disease transmission, repellents effects on, *Myzus persicae* 6979
 volatiles, chemoreception, pollution effects, sulfur dioxide, pests, *Insecta* 5132
 weed control, chemical control, *Notaris bimaculatus* feeding effects on, *Agropyron repens* 1250
 weed control, feeding, *Euzophera cinerella*, *Artemisia absinthium*, 7668
 weeds, beet yellows virus vectors, *Myzus persicae*, USA, Washington 6175
 weeds, species composition, *Lygus*, USA, Washington 8350
 wind removal, *Tetranychus neocaledonicus* 7775
Zygaena lonicerae, British Isles 5224
 Host preferences
 blood meals, *Culicoides*, Zimbabwe 1997
 blood meals, genetic variance, *Anopheles culicifacies*, Sri Lanka 9430
 blood meals, *Hemaphysalis punctata*, Netherlands, Texel 1 4388
 chemical stimuli, *Allium cepa*, chemotaxis, *Hylemya antiqua* 411
 chemotaxis, *Allium cepa*, microorganisms, volatiles, *Hylemya antiqua*, *Fannia canicularis*, *Myrmica* 230
 feeding behavior, breeding, *Phlebotomus martini* 3567
 food plants, *Leguminosae*, *Myzus persicae*, *Acyrtosiphon kondoi*, *Aulacorthum solani*, *Acyrtosiphon pisum* 6945
 food plants, *Papilio glaucus canadensis* 3595
 geographical distribution, parasites, *Amphipsylla quadratidigitata* 783
 hematophagy, *Aedes*, *Culex*, USA, Iowa 1198
 host plants, feeding bioassays, chemical stimuli, *Pissodes strobi* 5162
 host plants, oviposition, *Apanteles flavipes* 2979
 host plants, oviposition, Brassica, Sweden 4401
 host plants, reviews, *Helianthus annuus*, *Insecta* 4390
 host plants, sensory stimuli, herbivores, *Insecta* 8070
 host plants, *Vaccinium*, *Rhagoletis mendax* 3639
 host plants, varieties, *Corynephala*, *Triticum aestivum* 7674
 host-parasite interactions, oviposition, parasitoids, *Poecilostictus cothurnatus*, *Bupalus piniarius*, Netherlands 5179
 hyperparasitism, *Microterys flavus*, *Cheloneurus parlia* 5185
 hyperparasitism, *Microterys flavus*, *Marattia javensis* 5184
 hyperparasitism, *Microterys flavus*, *Pachyneuron concolor* 5177
 life cycle, *Aulacophora foveicollis* 9106
Lutzomyia, Panama 653
 oviposition, *Coccophagus cowperi* 2732
 oviposition, host plants, *Euphydryas editha* 5955
 oviposition, host searching behavior, host plants, *Colias philodice* *eriphyle* 6682
 parasites, effects on development, *Bracon brevicornis* 509
 parasites, *Ixodes matoi*, *Mammalia*, Zimbabwe 519
 parasites, life cycle, *Nosomma monstrum* 7548
 parasites, reproduction, *Sturmia inferens*, *Chilo infuscatellus*, *Chilo auricilius*, *Aceria stenellus* 1216
 parasitoids, *Noctuidae*, USA, Florida 4374
 parasitoids, *Trichogramma chilonis*, *Trichogramma exiguum* 7544
Phlebotomus, Kenya 1335
 population density, grasses, *Cicadellidae*, *Delphacidae* 710
 population studies, biotopes, population genetics, *Nilaparvata lugens* 3604
 predators, parasites, *Heliothis*, Colombia 555
 vectors, vector-borne diseases, host plants, feeding behavior, oviposition, dispersion, abundance, spatial distribution, orchards, food preferences, *Scaphytopius acutus*, *Prunus persica*, *Trifolium pratense* 526
 Host range
 baculovirus, infection, activation, *Spodoptera*, *Heliothis* 2619
 first record, *Coleomomyces africanus*, *Mermithidae*, *Culicidae*, Angola 1271
 host plants, historical account, *Umbelliferae*, *Pisla rosae* 8341
 pest control, parasitoids, Aphididae 6769
 Host searching behavior
 activity patterns, *Medicago* host plants effects on, *Hypera postica* 2055
 activity, seasonal variations, *Cybus salinaris* 660
 alarm pheromone effects on, *Mulius persica* 7343
 atmospheric conditions effects on, gases, *Ornithonyssus* 1937
 attractants, repellents, *Cavariella agropodii* 2056
 blood meals, gonotrophic cycles, *Leptocnops carteri* 8291
 effects on host coloration *Diptera*, *Egypa zebra* 2130
 egg laying, population density, hosts, *Neodiprion sertifer*, *Lophyproctus luteator* 6757

Host searching behavior, (continued)

- feeding behavior, olfactory stimuli effects on, host plants, *Dendroctonus frontalis*, *Pinus taeda* 1941.
 feeding behavior, visual stimuli, olfaction 1201.
 flight activity, *Myzus persicae* 1978
 hormones, 20-hydroxyecdysone, *Aedes aegypti* 5875
 host plants odors, olfaction, *Psila rosae*, *Daucus carota* 8264
 host plants, olfaction, host preferences, *Colinus philodice* ephyllae 6682
 host plants, temperature effects on, *Cydia pomonella* 8277
 host-parasite interactions, dispersal, *Trichogramma pretiosum*, *Heliothis zea*, USA, Georgia 2023.
 inhibition, vitellogenesis effects on, *Aedes aegypti* 2807.
 kairomones, biological control, hosts, eggs, *Trichogramma pretiosum* 3357.
 kairomones effects on, *Trichogramma pretiosum*, *Heliothis zea* 423
 optimization, kairomones, parasitoids, *Asobara tabida*, *Drosophila melanogaster* 7539.
 oviposition, edge effect, *Anthracis cardamines* 4290.
 oviposition, parasites, *Aphytis*, *Aspidiotus nerii* 7542.
 oviposition, parasites, *Poecilostictus cothurnatus*, *Bupalus piniarius* 2020.
 oviposition, parasitoids, *Amilus hesperidum*, *Encarsia opulenta*, *Aleurocautus woglumi* 2830.
 parasites, *Paracryptophonyx africanus* 9132.
 parasitoids, chemical stimuli, *Musca domestica*, *Muscidifurax raptor*, *Muscidifurax raptor*, *Spalangia cameroni*, *Spalangia endius* 8319.
 parasitoids, eggs, *Trichogramma*, *Heliothis zea* 5940.
 parasitoids, host-parasite interactions, *Euphydryas phaeton*, *Apanteles eupydryidis* 8317.
 parasitoids, hosts defense mechanisms, *Apanteles eupydryidis*, *Euphydryas phaeton* 5932.
 parasitoids, kairomones effects on, *Microplitis croceipes*, *Heliothis zea* 2824.
 parasitoids, olfactory stimuli, hosts, *Sitona hispidulus*, *Piaton lameri* 7537.
 parasitoids, oviposition, fecundity, *Ascogaster reticulatus* 7482.
 parasitoids, oviposition, kairomones, eggs, *Adoxophyes*, *Ascogaster reticulatus* 7485.
 population density effects on, competition, parasitoids, *Venturia canescens* 3652.
 visual stimuli effects on, *Podosesia syringae* 2248.
 visual stimuli, olfaction, *Glossina* 1202.
Host selection,
 colonization, pheromones, kairomones, allomones, reviews, *Scolytidae* 6684.
 disease transmission, leishmaniasis, *Trypanosoma*, *Lutzomyia*, Panama 653.
 exploratory behavior, parasitoids, predator-prey interactions, *Anisopteromalus calandera*, *Callosobruchus maculatus* 4367.
 herbivores, nutrients, feeding stimulation, *Gastrophysa atrocyanea* 486.
 host plants, chemical properties, phenols, *Populus angustifolia*, *Pemphigus betae* 8345.
 host plants, oviposition, distribution, eggs, *Oscinella frit* 7486
 host plants, sensory stimuli, herbivores, *Insecta* 8070
 legumes, markers, oviposition, *Callosobruchus maculatus* 1899.
 oviposition, competition, population density, parasites, *Bioester longicaudatus* 2028
 oviposition, fecundity, parasitoids, *Euplectrus kuwanae* 2742.
 Parasites, *Rhodium pallescens*, *Mammalia*, Panama 667
 parasitoids, eggs, *Heliothis virescens* 2815
 parasitoids, kairomones, recognition, eggs, *Heliothis virescens*, *Telenomus heliothidis* 5186.
 stress, hosts, life history, ecology, *Platymyrmex bilineatus*, USA, Hawaii 1961
Host specificity,
 adaption, pest control, *Insecta*, *Glycine max* 707.
 aquatic plants, biology, *Ochetina bruchi*, *Oncylis crenatus*, Argentina 2053
 biological control, aquatic weeds, *Hydrilla verticillata*, *Paraponyx rugosalis*, USA 2204.
 competition, parasites, *Chrysomelidae*, *Heliconia*, Costa Rica 4370
 host-parasite interactions, *Testastrichus hagenowii*, *Blatta orientalis*, *Periplaneta americana*, *Blatta germanica* 504
 new species, new records, parasitoids, *Tyrodites*, Australia 1589
 oviposition, parasites, *Dryinidae*, *Dichoptera hyalina*, *Eurybrachys tomentosa* 401
 parasitism, oviposition, *Brochymena*, *Trichopoda plumipes*, USA, Texas 2024
 pathogens, tropical environment, forests, *Cordyceps*, *Insecta* 3649
 photoxalis, parasites, *Anodonta imbecilis* 5191
Host-parasite interactions,
 abundance, parasites, *Metopopolium dirhodum*, *Sitobion avenae*, *Hymenoptera* 1228
Anthonomus grandis, *Mermithidae*, new genus, *Nematoda*, taxonomy, new records, USA, Louisiana 601
Antispila anna, *Syzgium jambolana*, damage 3593
Aphididae 1221.
 biology, *Archippus senestructus*, Japan 872
 cycles, population density, *Diatraea*, *Trichopria cubensis*, *Paratheresia clarpulpi*, Trinidad 5986
 dispersal, host searching behavior, *Trichogramma pretiosum*, *Heliothis zea*, USA, Georgia 2023
 ecological distribution, altitude, *Colophora alticola*, *Gonotopus melanostoma*.
Scambus brevicornis, *Tetrastichus endemus* 4371
 effects on hosts development, *Manduca ulmi*, *Lycosa rabida* 4369
 effects on, metabolism, body weight, *Bos*, *Boophilus microplus* 647
 feeding behavior, reviews, *Heliothis zea* 445
 feeding physiology, legumes, *Nilaparvata lugens* 5675
 growth, diets, *Aedes aegypti*, *Brugia pahangi* 289
 growth, hosts, *Galleria mellonella*, *Gonia cinerascens* 2825
 herbivores, development, variation, clones, *Solidago*, *Uroleucon caligatum* 5963
 host plants developmental stages, assimilation, *Pyrenia sinica*, Japan 981
 host plants, exudates feeding, pests, *Saundersia*, *Pyriogramma*, Germany, Fed Rep. Darmstadt 1207
 host searching behavior, parasitoids, *Euphydryas phaeton*, *Apanteles eupydryidis* 8317
 host specificity, *Testastrichus hagenowii*, *Blatta orientalis*, *Periplaneta americana*, *Blatta germanica* 504
 hosts body weight, *Galleria mellonella*, *Gonia cinerascens* 2827
 hosts body weight, pupae, *Galleria mellonella*, *Gonia cinerascens* 2822
 hosts density, environmental factors, *Dendroctonus frontalis*, *Dendrosoter sulcatus*, *Heydenia unica*, *Rhopalicus*, *Protoparvus xylophagorum* 505
 hosts diapause, *Lydella thompsoni*, *Archana geminipuncta* 1857
 hosts growth, juvenile hormones, *Galleria mellonella*, *Gonia cinerascens* 2826
 hosts population density, parasites development, *Galleria mellonella*, *Gonia cinerascens* 2829
 infection, pathogens, *Pseudaletia unipuncta*, *Hypoosoter exiguae*, *Neoplectana*

Host-parasite interactions, (continued)

- carpocapsae 1804
 larvae, *Euplectrus putleri*, *Anticarsia gemmatilis*, USA, Florida, Dade County 508
 larvae, *Lepidoptera*, *Apanteles marginiventris*, *Meteorus autographae*, *Glycine max*, USA, South Carolina 507
 larviposition, chemical stimuli, *Lixophaga diatraea*, *Diatraea saccharalis* 5941.
 legumes, *Zytriga diva* 695
 life history, reproduction, parthenocarp, *Frumenta mundella*, *Solanum carolinense* 449
 livestock, 33 species, *Ixodoidea*, Ethiopia 1309
 mortality, *Neoplectana carpocapsae*, *Heterophobidius bacteriophora*, *Scolytus multistriatus* 599
 oviposition, host preferences, parasitoids, *Poecilostictus cothurnatus*, *Bupalus piniarius*, Netherlands 5179
Paraponyx badialis, *Mynophyllum spicatum* 527.
 parasitism intensity, *Villa brunnea* 2035
 parasitoids, embryogenesis, instars, *Ostrina nubilalis*, *Macrocentrus grandis* 3489
 pathology, immunological aspects, *Sarcoptes scabiei* 3671
 pathology, *Trypanosoma*, *Glossina* 1021
 pests, *Drosophila thoracica*, Senegal 7751
 population density effects on, parasitoids, *Insecta* 3575
 population dynamics, adults, larvae, *Anastrepha fraterculus* 534
 population growth, *Bruchus hebetor*, *Ephestia cautella*, *Acrocha grisella*, *Galleria mellonella* 1227
 population levels, host plants phenology, *Onus insidiosus* 1253
 range extension, geographical distribution, *Catorhintha mendica*, *Mirabilis ocytanea*, USA, East Coast 4397.
 resistance, *Amblyomma americanum*, *Cavia* 1232.
Scolytus obscurus, *Dolichotarsus*, USA, Oregon 448
 spatial distribution, *Quadriceps domine*, *Quadriceps novaezealandiae*, *Quadriceps cedemayon*, *Charadrius obscurus*, *Thrinoris novaezealandiae*, *Anartynchus frontalis*, *Charadrius bicinctus*, New Zealand 512
 streams, *Simulium ornatum*, *Simulium equium*, *Simulium angustipes*, *Sperchon setiger*, British Isles, England 8313.
 susceptibility, diets: *Aedes aegypti*, *Brugia pahangi* 288
 temperature, effects on population dynamics, *Phytomyza ruficornis*, *Chrysoschelis genibus*, *Duglythys puzosensis* 7577.
Thymelicus lineola, pathogens, *Zoophthora radicans*, *Entomophthora egressa*, pest control 3420.
 traps, catching methods, attractants, color, site location, crop protection, monitoring, *Sappya pumila*, *Megachile rotundata* 718.
Trichogramma, seasonal variations, larvae, *Rachispia* ovi, *Autographa biloba*, USA, Florida 1294
Host-pathogen interactions,
 granulosis virus, *Pteris rapae*, *Apanteles glomeratus* 4190.
Host-searching behavior,
 kairomones, *Chelonis curvicaudatus* 5944.
Hosts,
 abundance, parasitoids effects on, *Trichopoda giacomellii*, *Nezara viridula* 2018.
 age effects on eggs suitability, parasitoids, *Trichogramma*, *Sepeolus fuscipennis* 8320
 age, effects on parasitoids development, *Coccynomyia turionellae* 8330.
 aging methods, estradiol binding, blood meals, *Rodentia*, *Culicidae* 6888
Albizia falcataria, new records, *Pteroma plagiophleps*, defoliation, *Moluccas* 2092
 aquatic organisms, pathogens asexual reproduction, *Entomophthora conica*, *Entomophthora fluspora*, *Insecta* 1809
 bait, light traps, CDC trap, *Culiseta melanura* 5620
 behavior, parasitoids effects on, natural selection, survival 6752.
 biological control, parasites, *Dendrosoter protuberans*, *Scolytus multistriatus* 2017
 biological control, parasites, disease transmission vectors, *Mermithidae*, *Insecta* 3649
 biological control, parasites, *Nematoda*, *Insecta* 3614.
 blood meals, domestic animals, females, *Psorophora columbiae*, USA, Texas 6074.
 blood meals, feeding behavior, *Aedes aegypti*, *Rodentia* 5160.
 blood meals, *Glossina morsitans submorsitans*, *Glossina palpalis gambiensis*, Mali 9126
 blood meals, *Mammalia*, *Culicidae*, *Chironomidae*, Australia, Northern Territory 1678
 blood sucking, olfaction sensilla, *Diptera*, *Phthiraptera* 2532.
 body size effects on parasitoids reproductive strategy, sex ratio, *Heterospilis prusipidis* 7538
 body size, egg laying, sex determination, *Pimplinae* 7471.
 body weight, growth, host-parasite interactions, *Galleria mellonella* 2825.
 body weight, parasitism, *Galleria mellonella*, *Gonia cinerascens* 2827
Boophilus microplus, parasites, *Babesia bovis*, effects on, oviposition, fecundity 2038
Breinhia sergenti vectors, *Culex pipiens pallens*, *Aedes albopictus*, China, People's Rep., Yunnan Province 5288
Camelia sinensis, *Xyleborus formicatus*, new records, *Acacia decurrens*, India, Nilgiris 2088
 catarrh, parasites, *Cuterebra emasculator*, *Cuterebra fontinella* 6778.
Cerocephala rufa, *Cerocephala eocrotopastri* 2459
 check lists, *Eurytoma*, North America 8825
 chemotaxis, life cycle, development, population dynamics, *Simuliidae*, *Mammalia* 1190
 coloration, host searching behavior effects on, *Diptera*, *Equus zebra* 2130.
 defense mechanisms, parasitoids host searching behavior, *Apanteles eupydryidis*, *Euphydryas phaeton* 5932
 defoliation, effects on survival, *Insecta*, *Pinus kesya*, *Pinus oocarpa* 3596.
 development, distribution, *Scaphytopius nitridus* 8220
 development, emergence, temperature effects, *Lirionyx sativae* 1869.
 development, parasites effects on, *Copidosoma truncatellum*, *Trichoplusia ni* 8327.
 development, parasitoids effects on, *Apanteles smerinthi*, *Manduca sexta* 8328.
 diapause, effects on parasites, *Lydella thompsoni*, *Archana geminipuncta* 1857.
 diets, toxins, parasitoids, *Hypoosoter exiguae*, *Heliothis zea* 3578.
 discrimination, oviposition experience, *Pteris rapae crucivora*, *Apanteles glomeratus* 7497
 disease reservoirs, Parasites, *Rhodium pallescens*, *Mammalia*, Panama 667.
 ectoparasites abundance, *Florinia externa*, *Typha canadensis*, USA, Pennsylvania 437.
 ectoparasites, surveys, *Acarales*, *Mus musculus* 513.
 ectoparasites, transmission, domestic animals, *Psoroptes ovis*, *Ovis canadensis*

Hosts, (continued)

651
effects on abundance, *Dacus opulæ*, Australia 3636
effects on parasites development, *Muscidifurax raptor*, *Spalangia drosophilæ*, Diptera 2116
eggs, host searching behavior, kairomones, biological control, *Trichogramma pretiosum* 3357
eggs, parasitoids, *Clavigralla tomentosellus*, Africa 2814
eggs susceptibility, parasitoids, *Trichogramma minutum*, *Chorstoneura fumiferana* 8329
emergence, parasites effects on, *Microctonus vittatæ*, *Phyllotreta cruciferae*, *Phyllotreta strolata* 8316
encapsulation, eggs, parasitoids, venom, *Pternis rapæ crucivora*, *Apanteles plumerus* 8325
fecundity, pathogens infection effects on, *Nosema carpocapsæ*, *Cydia pomonella* 2632
growth, development, pathogens effects on, *Parasitocys tribolii*, *Tribolium castaneum* 1027
growth, host-parasite interactions, juvenile hormones, *Galleria mellonella*, *Gonia cinerascens* 2826
Heteromys desmarestianus, *Pseudoschoengastia disparungus*, parasites, new species 1590
host-parasite interactions, effects on development, *Mantispa uhleri*, *Lyceoa rabida* 4369
hyperparasitism, oviposition, *Lyneon orbis*, *Laugoo retentor*, *Megalopyge opercularis* 3579
identification, blood meals, complement fixation, *Glossina morsitans* 2011
immune response (humoral), parasites, *Hyemeniopsis diminuta*, *Periplaneta americana*, *Schistocerca gregaria* 1010
immune response, parasites, *Drosophila immutis*, *Aedes trivittatus* 1031
infection, *Dorytheneus paradoxus*, *Macracanthorhynchus huridus*, *China*, *People's Rep.*, *Laoning Province* 5289
infection, nuclear polyhedrosis virus, discrimination, parasites, *Lymantria dispar*, *Apanteles melanoscelus* 5942
intestinal parasites, Arthropoda, *Zenaida macroura*, *Zenaida asiatica*, USA, Florida 3582
juvenile hormones effects on growth, *Galleria mellonella*, *Gonia cinerascens* 6764
kairomones, effects on parasites oviposition, *Nematus canescens*, *Ephesia kuehnelia* 4384
kairomones, effects on parasites oviposition, *Tetrastichus schoenobii*, *Trypoxylon nebulosus* 1218
kairomones, effects on parasitoids oviposition, *Cardiocheilus nigripes*, *Heliothis virescens* 5176
kairomones, host-searching behavior, *Chelonus curvicaudatus* 5944
larvae attachment, blood meals, cattle, *Amblyomma americanum* 8349
larvae development, *Chelonus insularis* parasitoids effects on, *Heliothis virescens* 1218
larvae, effects on parasites development, *Bracon brevicornis* 509
Lepidoptera, parasitoids competition, Diptera, *Hymenoptera* 1224
Lepidoptera, parasitoids competition, *Hymenoptera* Diptera 1225
life cycle, abundance, *Haemaphysalis punctata*, *Ixodes ricinus*, British Isles, Wales 5263
life cycle, parasites, *Megalopyge opercularis* 2027
Lygus hesperus, parasites, *Leontopodium uniflorum* 2022
Martes americana, *Sorex cinereus*, *Eutamias minimus*, *Clethrionomys rutilus*, *Microtus pennsylvanicus*, *Microtus longicaudus*, *Lemmus sibiricus*, *Synaptomys borealis*, parasites, *Siphonaptera* 2037
Microdon 2427
morphology, parasites effects on, *Mermithoidea*, *Einfeldia dissidens* 7393
Nematoda parasites, *Insecta* 3956
new records, infection, *Entomophthora erupta*, *Notostira elongata*, Switzerland 6609
new records, *Ixodidae*, Italy, Abruzzo 7105
new records, parasitism, *Hyalomysodes triangulifer*, *Glischruchilus fasciatus* 6760
new records, *Styliola bicirculata*, *Barbastella barbastellus*, *Nycteria latreilli*, *Myotis emarginatus*, *Nycteria schmidlii*, *Plecotus auritus* 7903
new records, *Tachinaeplegus zealandicus* parasitoids, *Protophthora* 4378
new species, *Duculacarus targuiensis*, *Ducula chalconota*, Indonesia 2387
new species, parasites, *Encarsia micoi*, *Encarsia abatei*, *Eretmococcus cadabae*, Africa 4881
new species parasites, isolation, *Ramicephalus olivaceus*, *Ceragrion olivaceum* 2628
olfaction, parasites, *Hymenoptera*, *Dendroctonus frontalis* 4912
olfactory stimuli, host searching behavior, parasitoids, *Sitona hispidulus*, *Patasson laevis* 7537
Oreotrachis oreotrachus, Mammalia, Zimbabwe 519
Orygia pseudosugata, parasites, *Telenomus californicus* 2051
parasites abundance, digestive tract, diurnal variations, *Thelastoma bulbovis*, *Periplaneta americana* 2642
parasites, *Cheyletiella*, *Cheyletiellidae*, Mammalia 92
parasites competition, *Lymantria dispar*, *Apanteles melanoscelus*, *Rogas lymantriae* 7545
parasites, Competition, *Phthorimaea operculella*, *Copidosoma koehleri*, *Apanteles subandinus*, South Africa 2122
parasites damage, *Brachyotocoris puncticornis*, *Fraxinus excelsior* 32
parasites development, *Hepatozoon erhardovae*, *Siphonaptera* 4183
parasites development, *Litomosoides carlini*, *Ornithonyssus bacoti* 2634
parasites development, Plasmidom, *Culicidae* 2625
parasites development, temperature effects on, *Gonia cinerascens*, *Galleria mellonella* 6772
parasites dispersal, *Scelio fulgidus*, *Acrididae* 4451
parasites, distribution, *Ectenesa psammæ*, *Megadiera psammæ* 4387
parasites distribution, factors affecting, Arthropoda, Mammalia 3585
parasites effects on, parasites, biological control, *Mermithidae*, *Simuliidae* 3403
parasites effects on, pathology, biological control, *Mermithidae*, *Insecta* 3749
parasites, eggs, *Macrosetia surfacei*, *Orchelimum fidicinum*, USA, Alaska 5187
parasites, *Encyrtidae*, *Antonia grammis*, South Africa 2029
parasites, geographic distribution, *Psites eskii*, *Pseudopis mandschurica*, Japan 2445
parasites, geographic distribution, *Amblyomma*, *Aponomma*, *Reptilia*, Australia 3584
parasites, *Halarachne halichoeri*, *Orthohalarachne attenuata*, *Orthohalarachne diminuta*, *Eumetopius jubatus*, *Phoca vitulina*, *Phoca largha*, USA, Alaska 4385
parasites host searching behavior, oviposition, *Aphytis*, *Aspidiotus nerii* 7542
parasites, *Iguanacarus* 9

Hosts, (continued)

parasites, incidence, *Phthorimaea operculella*, Australia, Queensland 2828
parasites infection, new species, *Nosema hyllobii*, *Hylobius abietis* 8131
parasites infestation, *Pymotes tridici*, *Aracerus fasciculatus*, USA, Florida 5188
parasites infestation, seasonal variations, *Ixodes trianguliceps*, Mammalia, Germany, Fed. Rep. 7547
parasites, infestation, species composition, Chalcidoidea, *Sphaerolecanium prunus* 9138
parasites, larvae, *Lytta sayi*, *Agapostemon virescens* 6759
parasites life cycle, *Goniozus emigratus*, *Parmelyon transatlantica* 6754
parasites life cycle, *Plethrophora schubergi* neustriæ, *Malacosoma neustriæ* 8124
parasites life history, morphology, *Tetractinospora victoris*, *Ceragrion comandelianum* 2640
parasites, Mallophaga, *Numenius americanus*, USA, New Mexico 3581
parasites, mouth parts, *Pales pavidus*, *Galleria mellonella* 510
parasites, *Mutophora*, *Chloroptera*, South America 10
parasites morphology, *Arrenurus*, *Ischnura verticalis* 84
parasites morphology, *Belvosia biemata*, *Pachylia syces* 6755
parasites morphology, *Menacanthus alaudæ*, *Galeria cristata* 9145
parasites morphology, *Tachinidae*, *Schistoseps decussata* 5189
parasites mouth parts, ultrastructure, *Arrenurus*, *Ischnura verticalis* 2505
parasites, new species, *Actinocyphus ellipsoides*, *Ischnura delicata* 2627
parasites, new species, *Aphelinus prociophili*, *Prociophis fraxinifolia*, USA, Iowa 39
parasites, new species, *Cephaleta hayati*, *Cerrococcus*, India 4872
parasites, new species, *Eadia neurotrichis*, *Neurotrichis gibbosi* 796
parasites, new species, *Lepidophora typoxylona*, *Trypoxylon tenocitatum* 2414
parasites, new species, *Tribolium spondilialis*, *Tegolophus virescens*, India, West Bengal 3969
parasites, new species, *Tortombicula kirchocephalus*, *Pitohui kirchocephalus*, New Guinea 3968
parasites oviposition, *Poecilostichus cothurnatus*, *Bupalus piniarius* 2020
parasites, pest control, *Chrysotomomyia*, *Liriomyia sativæ*, *Liriomyia trifolii*, USA, Texas 4690
parasites phototaxis, *Anodontia imbecilis*, *Unioleuca formosa* 5191
parasites, *Physocephalus sexalatus*, *Ascarops strongylina*, *Gongyloema pulchrum*, *Onthophaga gazella*, USA, Georgia, USA, Texas 9203
parasites population dynamics, *Ixodidae*, *Microtus canicaudus* 6777
parasites, reptiles, *Leptinus*, North America 9498
parasites surveys, *Heterodorus*, *Pentagale* 7921
parasites surveys, *Phthiraptera*, *Haemaphysalidae* 516
parasites transmission, Diptera, *Cervus elaphus* 662
parasites venom effects on development, *Hymenoptera* 502
parasites, *Whartonia kulundadensis*, *Dobsonia panniensis*, *Dobsonia moluccensis*, Papua New Guinea, Irian Jaya 797
parasitism, biological control, *Pedobius foveolatus*, *Epilachna virescens* 2032
parasitism, effects on longevity, *Bursaphelenchus lignicolus*, *Monochamus alternatus* 7623
parasitism, *Eutrichopodopsis nitens*, *Tabanus viridula*, *Alacia* 6758
parasitism, *Parasitaphelenchus*, *Ips sexdentatus* 6879
parasitism, *Rhipicephalus furcatus*, *Tabanus leleai* 9133
parasitism, stylization, *Stylops crawfordi*, *Andrena*, USA, Texas 6763
parasitism, *Tachinidae*, *Pentatomidae*, USA, Texas, USA, South Carolina 2019
parasitoids, association, *Phaenocarpa frustana* 9140
parasitoids bionomics, *Euplectrus kuwanae*, *Argyrogramma albostriata* 1223
parasitoids body size, sex differences, *Trichogramma minutum* 8323
parasitoids competition, interspecific relationships, *Heliothis virescens* 2811
parasitoids effects on behavior, survival, *Euphydryas phaeton* 1220
parasitoids effects on population decline, *Xanthotera politum*, USA, New Jersey 2034
parasitoids emergence, juvenile hormones effects on, *Apanteles congregatus*, *Manduca sexta* 5935
parasitoids emergence, survival, insecticides effects on, *Amutis hesperidum*, *Prospaltella opulenta*, *Aleurocanthus woglumi* 2245
parasitoids, *Exoristella philippensis* 5935
parasitoids, host searching behavior, oviposition, *Amutis hesperidum*, *Encarsia opulenta*, *Aleurocanthus woglumi* 2830
parasitoids, life cycle, *Dibrachys boariae*, *Galleria mellonella* 9131
parasitoids, life cycle, *Phasgonophora sulcata*, *Agrilus bilineatus*, USA, Wisconsin 2016
parasitoids, nutrition, nitrogen uptake, *Brachymeria intermedia*, *Coccygnus turionellæ*, *Lymantria dispar* 8326
parasitoids, population dynamics, life cycle, *Anthrax gideon*, *Anthrax analis* 8383
parasitoids, reproduction, *Spalangia cameroni*, *Stomoxys calcitrans* 5181
parasitoids reproductive effort, *Xanthopimpla stemmator*, *Chilo partellus* 8315
parasitoids, strains, interbreeding, *Apanteles melanoscelus*, *Lymantria dispar* 8324
pathogenicity, *Beauveria tenella*, *Ceramybeidae* 2636
pathogens, *Conidiobolus obscurus*, *Acyrtosiphon pisum*, *Sitobion avenae* 2621
pathogens, immunity, *Neomaphetana carpocapsæ*, *Hyalophora ecretopia* 2641
pathogens, larvae, *Entomophthora egressa*, *Choristoneura fumiferana* 1030
pathogens life cycle, *Nosema carpocapsæ*, *Cydia pomonella* 2633
pest resistance, infestation, guinea-pigs, *Demacnoer andersoni* 5272
phenology, effects on abundance, *Dacus opulæ*, *Dacus tenificatus*, Australia 3636
physiology, effects on parasitoids development, *Biostes longicaudatus*, *Anastrepha persica* 9135
physiology, parasites effects on, *Mermithidae*, *Insecta* 3404
Pinus banksiana, new records, parasites, *Hyssopus thymus*, *Phrynosfrontina* 2057
plants, oviposition determinants, *Hylenia* 528
population density, effects on parasites fecundity, *Trichogramma pretiosum* 4373
population density effects on parasites, longevity, fecundity, *Aphelinus semiflavus*, *Acyrtosiphon pisum* 8318
population density, effects on parasites population dynamics, *Gonia cinerascens*, *Galleria mellonella* 6773
population density, host searching behavior, *Neodiprion sertifer*, *Lophyplectus luteator* 6757
population density, host-parasite interactions, *Dendroctonus frontalis*, *Dendroctonus valens*, *Heidenia unica*, *Rhopalus*, *Protophyx xylophagorum* 505
population density, parasites development, *Galleria mellonella*, *Gonia cinerascens* 2829
range, *Nilaparvata lugens*, *Leptocoris acuta*, infection, *Syncephalastrum racemosum*, *Penicillium oxalicum* 1815
records, Chiroptera, *Whartonia oweni*, Tanzania 6344

Hosts, (continued)

- reproduction, parasitism effects on, Nosematidae, *Chilo sacchariphagus* 9009.
 reproductive organs, parasitoids infestation effects on, Aphidius smithi.
Acyrtosiphon pisum 6774.
 Romanonemus culicivox, postparasites, Anopheles freeborni, Culex tarsalis,
 control, larvae 2168.
 salivary gland secretion, nutrient requirements, Trypanosoma, Glossina morsitans
 983.
sex ratio, parasitism, Heleidomus viviparus, Cucoides varipennis 6024
 survival, parasitism effects on, Bonnetia comata, Agrotis ipsilon 6753.
 symbionts, new species, taxonomy, Onthophagus, Cosmetolaelaps 800.
 taxonomy, parasites indicators, Myobiidae, Chiroptera 5950.
 tissues, parasites migration, Cuterebra fontinella, Peromyscus leucopus 2832.
 Trichogramma, USA, Hawaii 4021.
 vectors, Rocky Mountain spotted fever, Mammalia, Acarina, USA, California 1321.
 visual stimuli, visual evoked response, Mansonia, Anopheles ziemanni 1919.
- Hosts plants,**
 flowers color, pollinators effects on, Hyles lineata, Aquilegia caerulea 2834.
 Leguminosae, pests, abundance, Plathypena scabra, USA, Tennessee 1425.
- House dust,**
 allergens, dust, man, Acari 1371.
 allergic diseases, therapy, symptoms, man, Dermatophagoides pteronyssinus 7634.
 antigens analysis, Acari 2913.
 entomofauna, altitude effects on, Pyroglyphidae, Spain 575.
 new species, taxonomy, morphology, Dermatophagoides siboney, Cuba 3970.
 pests, life cycle, Dermatophagoides pteronyssinus 6056.
 sampling, Acari 4489.
- Houses,**
 kitchens, fecundity, population structure, Blattella germanica, USA, North
 Carolina 6032.
 pest control, chemical control, Blattella germanica 3789.
 pest control, chemical control, chiropterids, Blattella germanica 8557.
 pests, surveys, Blattella, Thailand 6666.
 urban environments, spatial distribution, Blattella germanica, USA, Virginia
 3645.
- Howardula busseyi,**
 parasites, biological control, mass rearing, Megastelia halterata 3027.
- Hughelechia,**
 new genera, taxonomy, Australia 4779.
- Hughelechia giulianii,**
 new species, taxonomy, morphology, Australia 4779.
- Hughelechia,**
 new genera, taxonomy, keys, USA, Arizona, Mexico 4784.
- Human impact,**
 environmental conditions, coloration, population studies, Aphantopus hyperantus,
 Finland 9186.
 roads, disease control, malaria, Brazil, Amazonas 8421.
- Human settlements,**
 association, Calliphoridae, India, West Bengal 9210.
- Humbertiella similis,**
 growth, food organisms, Drosophila 7434.
- Humerobates rostrimaculatus,**
 pollution indicators, pollution monitoring, air pollution, Belgium 5984
- Humidity,**
 activity patterns, Phlebotomus, Yugoslavia 2766.
 effects on alarm pheromone response, Apis mellifera 417.
 effects on development, survival, Ctenocephalides felis 359.
 effects on developmental stages, mortality, Oulema melanopus 1112.
 effects on foraging behavior, Apis mellifera 2046.
 effects on hatching, incubation, eggs, Pyrrhia perussilla 4259.
 effects on house dust entomofauna distribution, Pyroglyphidae, Spain 575.
 effects on life history, Dermacentor silvarum 475.
 effects on molting, survival, larvae, Amblyomma americanum 1860.
 effects on pathogens, Entomophthora phytomyi, Hypera postica 286.
 environmental effects, hygrophilia, Cryptotermes 5128.
 environmental effects, rearing, locomotor activity, flight activity, Locusta
 migratoria migratorides, environmental effects 4261.
 environmental effects, resting behavior, diurnal variations, physical activity,
 Diptera 4316.
 environmental factors, pest control, stored products, Triticum, Sitophilus oryzae
 7662.
 habitat preferences, environmental effects, survival, molting, larvae, Ixodidae
 1175.
 predatory behavior, prey capture, Notophthius biguttatus 4359.
 storage, biological control pathogens, Verticillium lecanii, Insecta 2217.
 stored products, effects on survival, fecundity, Sitophilus oryzae 6977.
- Humification,**
 leaf litter decomposition, soil properties, Jonepeltis splendida 5248
- Hungaria,**
 natural enemies, pest control, Persea plantations, Pseudococcus longispinus 2945
- Hungary,**
 check lists, species composition, Opinae, Microgasterinae 8687
 geographical distribution, species composition, surveys, Rhyssophila 3940
 identification key, 3 species, Acanthoscelidae 3932
 new records, geographical distribution, Micropodoptera 8684
 new records, geographical distribution, Telenomus aradi 8685
 new records, surveys, Apanteles 3157
 new species, Liodontomerus curticaudatus, Habrobitoides perardens 37
 new species, new records, Acanthomyioides hungaricus, Coccidea 2441
 new species, taxonomy, morphology, Aphanoisma hungaricum 7967
 new species, taxonomy, morphology, Argysthia sorbiella, Epinoxa brunniciana,
 Tachinus erichsonii, Thera albomaculata 7995
 new species, taxonomy, morphology, Stenus josefkráli 7952
 occurrence, Wesmaelius helveticus 8675
 pests, reproduction, population growth, Curculio elephas 7703
 surveys, geographical distribution, traps, Thysanoptera 3156
- Hungary, S. Transdanubia,**
 check lists, species composition, Macrolepidoptera 8681
- Hungary, Balaton Upland,**
 occurrence, Anarta myrtilli 8686
- Hungary, Bekes,**
 check lists, species composition, Carabidae, Cicindellidae 8683
- Hunger,**
 effects on sound production (biological), Glossina morsitans 260
 foraging behavior, predator-prey interactions, Coccinella californica,
Acyrtosiphon pisum 2872
- Huperanapis senegalensis,**
 morphology, predators, Coccinellidae, Congo, People's Rep. 4104.
- Hyadaphis erysimi,**
 occurrence, population dynamics, sampling methods, crop fields, USA, California
 9349
 pests, Brassica oleracea, USA, California 4608.
- Hyadaphis foeniculi,**
 weeds toxicity, Conium maculatum, USA, California 8353
- Hyadaphis tataricae,**
 damage, feeding effects on, Lonicera, Canada, Quebec 2043
 ornamental plants, pests, geographical distribution, dispersal, Lonicera, USA
 7793.
- Hyalipennis,**
 food utilization, metabolism, sugars 7321
- Hyalodocoris elongatus,**
 new species, taxonomy, morphology, Colombia 4849
- Hyalomma dromedarii,**
 embryos, inorganic pyrophosphatase activity, purification 3316.
- Hyalomma anatolicum,**
 parasites, vectors, disease transmission, India 2183.
 sandbit virus isolation, USSR, Tajikistan 9250.
- Hyalomma anatolicum excavatum,**
 samplers, design 1698.
- Hyalomma dromedarii,**
 chemical communication, pheromones, chemoreception 6686
 embryogenesis, protein biosynthesis, DNA, RNA 5829.
 vectors, Quarantaria virus, isolation, characterization, Kuwait 5270.
- Hyalomma excavatum,**
 pathogens, isolation, infectivity, Theileria annulata 6607
- Hyalomma marginatum rufipes,**
 parasites, disease transmission, cattle, new species, Babesia occultans 6065.
 vectors, babesiosis, livestock 3693
- Hyalomys triangulifer,**
 parasitism, new records, hosts, Glischtrichilus fasciatus 6760.
- Hyalomyzias,**
 keys, morphology, North America 5589.
- Hyalomyzias mitchellensis,**
 new species, taxonomy, morphology, USA, North Carolina 5589.
- Hyalophora Cecropia,**
 γ-amino butyric acid effects on neurophysiology, hemolymph 4152.
 cecropin B, cecropin D, amino acid sequence, homology, Antheraea pernyi 8952.
 cocoons composition, silk 5887.
 diapause termination, hormones, metabolism effects on 3480
 diets effects on enzymatic activity, carbonate dehydratase 201.
 digestive tract, active transport, potassium 2544.
 ecological distribution, habitat, urban environments, USA, Illinois 7597.
 enzymatic activity, brain adenylate cyclase, diapause 124.
 enzymes, chitin synthase, integument, characterization, inhibition 6559.
 food consumption, food conversion, feeding behavior, host plants 5970.
 hosts, immunity, pathogens, Neoplectana carposcapae 2641.
 immune response, antibacterial agents, proteins, chemical composition 203.
 immunity, gram-negative bacteria, antibacterial agents 1818.
 juvenile hormones biosynthesis, accessory gland, males 968.
 larvae, molting, role, hormones 2691.
 mudgut, potassium active transport, thallium inhibition 8074.
 peptides, cecropins, secondary structure, antibacterial activity 7314.
 protein biosynthesis, viellins, viellinogens 7313.
 pupae, immune response, Enterobacter cloacae infection 5038
 pupae, predation, feeding, Drosophila pubescens 7592.
 trachea, gas exchange, respiration 5671
- Hyaloplasma diaphanum,**
 new records, geographical distribution, USA, Florida 5534
- Hybanthus prunifolius,**
 pollinators, Melipona interrupta, predators, larvae, Cosmopterixidae, Panama
 2380
- Hybomitra,**
 hematophagy, cattle, Canada, Quebec 2802
- Hybomitra bimaculata,**
 life cycle, oviposition, egg production, development, Switzerland 6718.
- Hybomitra daeckei,**
 oviposition, flight activity, salt marshes, USA, New Jersey Coast 6710.
- Hybomitra distinguenda,**
 cattle pests, abundance, British Isles, Scotland 736.
- Hybomitra nigella,**
 new records, USSR, Amur 9462.
- Hybridization,**
 Amblyomma hebraeum, Amblyomma variegatum 5486
 analysis, cDNA, gene expression, heat shock proteins, stimulation ecdysterone,
 cell lines, Drosophila 7835
 analysis, cDNA, microinjection, chorion proteins, Bombyx mori, oocytes Xenopus
 laevis 8083
 analysis, DNA, rRNA genes, Attacus ricini 9393
 analysis, nuclei RNA, larvae, Drosophila 6240
 analysis, rRNA, rRNA 5S genes organization, chromosomes, Drosophila melanogaster
 6244
 biotypes, genetics, pests, Nilaparvata lugens 5489
 Bopophilus annulatus × Bopophilus microphilus, sterility, offspring 3112.
 cattle, resistance, ectoparasites control, Haemaphysalis longicornis 649.
 chromosomes crossing-over, gene expression, Drosophila simulans, Drosophila
 mauritiana 8655
 coloration, morphology, Chrysocarabus, Chrysorinax 7051
 cross-breeding, fertility, Tetranychus urticae, Tetranychus arabis 7880.
 DNA, fluorescence RNA, Drosophila melanogaster, Drosophila hydei 2304.
 DNA, genes, genetic analysis, Drosophila melanogaster 3917.
 DNA, nucleotide sequence homology, divergence, Drosophila 5453.
 cDNA + mRNA, salivary gland, Chironomus tentans 7829
 effects on apiculture production, Apis mellifera, Panama 2212.
 genes, heat shock proteins, Drosophila melanogaster 4672.
 nucleotide sequence, DNA, Bombyx mori 4661
 reproductive isolation, sympatric populations, Ostria 7050.
 sex chromosomes translocations, population genetics, Kaloterms approximatus
 3892.
 sex isolation, population genetics, Drosophila melanogaster 6281.
 sterility, inducers chromosomes, Drosophila melanogaster 2326
 survival, Ostria nubialis, Ostria obumbratilis, Ostria penitilis 7053.
 sympatric populations, reproductive isolation, Callisma 5247

Hybridization, (continued)

taxonomy, morphology, subspecies, *Euxoa comosa* 7998
taxonomy, *Saturia mendocino*, *Saturia walterorum* 7864
Tribolium freemani, *Tribolium castaneum* 3916
viability, *Anopheles minimus*, *Anopheles aconitus* 4691

Hybrids,

alleles, mutagenesis, *Drosophila* 3103
astrons, ribosomes, salivary gland cells, *Drosophila mulleri*, *Drosophila arizonensis* 5446
comparative studies, hemolymph carbohydrates, *Apis mellifera* 771
cytoplasm incompatibility, pathogens, *Aedes polynesiensis*, *Aedes kesseli* 5488
diapause eggs, protein composition, *Bombyx mori* 9420
diapause, winter survival, *Heliothis subflexa*, *Heliothis virescens* 1102
genes, courtship, mating behavior, *Drosophila melanogaster*, *Drosophila simulans* 3109
genetics, conditioning, phenotypes, central excitatory state, *Phormia regina* 6277
heterochromatin, polytene chromosomes, *Drosophila mulleri*, *Drosophila arizonensis* 5464
histones heterosis, age effects, *Drosophila melanogaster* 3453
honey production, correlation analysis, sugar plasma levels, *Apis mellifera* 5325
host plants, pest resistance, *Psylla pyracula*, *Pyrus ussuriensis* 3720
morphology, sympatric populations, *Anabolia fuscata*, *Anabolia nervosa*, Europe 7052

nucleolus organizer region, activation, *Drosophila* 5452
nucleolus organizer region, activity, regulation, *Drosophila mulleri* 3059
parthenogenesis, meiosis, Warramaba virgo 5460
pest resistance, *Pyrausta nilei*, *Zea mays* 3716
pest resistance, *Solanum berthaulti*, *Solanum tuberosum*, *Leptostarsa decemlineata* 8548
pollination, agricultural practices, *Gossypium*, *Apis mellifera* 6182
population studies, morphology, *Scaphandrea*, USA, Colorado 7063
populations, sex variants, *Chorthippus mollis* 2755
silk glands, weight, cocoons, *Bombyx mori* 6963
sterility, antibiotics effects on, *Heliothis subflexa*, *Heliothis virescens* 3501
sterility, gonads atrophy, *Drosophila simulans* 5067
sterility, mass rearing methodology, *Heliothis* 3243
systematics, *Muelleraella brevipennis*, *Muelleraella extrusa*, *Muelleraella farmae* 5487
taxonomy, *Chrysocarabus* 3110
taxonomy, morphology, *Lasius niger*, *Lasius alienus* 3217
varieties, *Stenotaphrum secundatum*, pest resistance, host plants, *Blissus insularis*, *Stenotaphrum secundatum* 8556

Hybridization,

Paxylomatidae, taxonomy, morphology 1647.

Hydora,

geographical distribution, new records, taxonomy, new species, *Hydora annectens*, *Hydora lenta*, South America 3167.

Hydora annectens,

taxonomy, morphology, new species, South America 3167.

Hydora lenta,

taxonomy, morphology, new species, South America 3167.

Hydora ulfida,

life history, New Zealand, Waitakere R. 451.

Hydradephaga,

phylogeny, taxonomy, systematics 4785.

Hydraena bohemica,

new records, geographical distribution, German Dem. Rep., Thuringia 4716.

Hydrellia philippina,

pests, natural enemies, parasites, Chaenusa, India 7673

Hydrellia valida,

feeding, parasitoids, *Spartina alterniflora*, *Opius*, *Pteromalus*, *Sympiesis*, USA, Florida, Oyster Bay 3621.

Hydrilla verticillata,

aquatic weeds, biological control, host specificity, *Parapoynx rugosalis*, USA 2204.

Hydrocarabona,

biochemical characteristics, taxonomy, *Onymacris plana*, *Onymacris rugatipennis* 5687

biochemical characteristics, taxonomy, *Physadesmia globosa*, *Stenocara gracilipes* 6565.

biosynthesis, *Periplaneta americana* 954.

cattle, attractants, bioassays, *Musca autumnalis* 1780.

cuticle, *Cylindrinotus laevicostriatus*, *Phyllan gibbus* 1730.

sexual dimorphism, molting, *Drosophila melanogaster* 943.

transport, hemolymph, cuticle, *Periplaneta americana* 7307

Hydrochara occulta,

bionomics, habitat, salt marshes 8281

Hydrochara simula,

new species, taxonomy, morphology, USA, Wisconsin 4819.

Hydrochara soror,

bionomics, habitat, marshes 8281.

Hydrocyphon segregis,

new records, geographical distribution, Iran 3978

Hydrodynamic,

filter feeders, functional morphology, larvae, *Simulium vittatum* 4353.

Hydroecia nordstroemi,

developmental stages, morphology, feeding 3255.

Hydrogen ions,

digestive tract, pH, *Neotermes besei*, *Odontotermes distans* 1747.

Hydrogen peroxide,

toxicity, larvae, *Aedes aegypti* 303.

Hydrogryllus,

taxonomy, synonymy, genera, *Guignotus* 2396.

taxonomy, synonymy, *Guignotus* 4796.

Hydrology,

environmental conditions, ecological distribution, *Chaoborus*, Tasmania, Fidler L. 6225.

streams, species composition, *Hydropsychidae* 9373.

Hydrolys,

β -(2-furyl)-acryloyl phosphate, adenosinetriphosphatase, cell surface membranes, embryos 4949.

juvenile hormones, diapause, larvae, *Diatraea grandiosella* 4256.

phosphatidylinositol, calcium channels, salivary gland, *Insecta* 4950.

Hydropertea,

morphology, taxonomy, Nearctic Region 1673.

Hydropertea crosbyi,

morphology, taxonomy, Nearctic Region 1673.

Hydropertea fugitans,

morphology, taxonomy, Nearctic Region 1673.

Hydropertea phormidia,

new species, morphology, Nearctic Region 1673.

Hydropertea crassiforceps,

new species, morphology, China, People's Rep. 3197.

Hydroporini,

taxonomy, classification systems, new genera 4772.

Hydroporus,

classification systems, nomenclature, taxonomy 4772.

Hydroporus boreus,

new species, taxonomy, morphology, North America 4774.

Hydroprene,

growth regulators, diapause, effects on development, *Hypera postica* 1873.

Hydropsyche,

benthos, colonization, USA, Mississippi R. 6226.

cadmium uptake, nitrolicarboxylic acid chelation, pollution indicators 6584.

larvae, growth, food quality effects on 396.

toxicity, *Simulium* larvae, *larvicide*, nontarget organisms 9016.

Hydropsyche acinaxosa,

new species, Spain 4066.

Hydropsyche betteni,

larvae, growth, food quality effects on 396.

Hydropsyche bifida,

morphology, coloration, keys, larvae, 7266.

Hydropsyche brenta,

morphology, coloration, keys, larvae 7266.

Hydropsyche cockerelli,

phototaxis, dispersal, larvae, USA, Columbia R. 5435.

phototaxis, larvae, dispersal 8606.

Hydropsyche dissimulata,

synonymy, *Hydropsyche modesta* 4067.

Hydropsyche espada,

new species, Eurasia 4067.

Hydropsyche gemecica,

new species, Eurasia 4067.

Hydropsyche lobata,

water quality, indicator species, Portugal, Vila do Conde 3053.

Hydropsyche modesta,

synonymy, *Hydropsyche dissimulata* 4067.

Hydropsyche purica,

new species, Eurasia 4067.

Hydropsyche recurvata,

morphology, coloration, keys, larvae 7266.

Hydropsyche slossonae,

larvae, growth, food quality effects on 396.

Hydropsyche sparna,

larvae, growth, food quality effects on 396.

Hydropsyche supersonica,

new species, Eurasia 4067.

Hydropsyche ulmeri,

pollution effects, insecticides, streams 5437.

Hydropsyche venularis,

metabolic rate, body weight, temperature effects on 4172.

Hydropsyche walkeri,

morphology, coloration, keys, larvae 7266.

Hydropsychidae,

streams, species composition, hydrology 9373.

Hydropsychoidae,

check lists, geographical distribution, new records, USA 8693.

Hydroptila fortuna,

systematics 4067

Hydroptilidae,

taxonomic revision, new genera, Australia 8703.

Hydrosmelectina linki,

new records, geographical distribution, German Dem. Rep., Potsdam, Rietzer See 4711.

Hydrotaca albipuncta,

cattle pests, abundance, British Isles, Scotland 736.

Hydrotaca irritans,

attractancy, traps, weather effects on, attractancy, traps, weather effects on,

Hydrotaca irritans 2983

cattle pests, abundance, British Isles, Scotland 736

(E)-10-Hydroxy-dec-2-enoic acid,

mandibular glands secretions, *Apis mellifera* 242.

20-Hydroxy-ecdysone,

effects on pupation, feeding, larvae, *Calliphora vicina* 7455.

10-Hydroxydecanol acid,

sterols, nutrition, larvae, *Apis mellifera* 8080.

20-Hydroxyecdysone,

effects on cell lines chemical composition, actin, *Drosophila* 168.

effects on cytoplasm, cell lines, embryogenesis, *Drosophila* 5811.

effects on development, diapause eggs, *Bombyx mori* 2675

effects on diapause, pupae, *Heliothis punctiger* 2679.

effects on gene expression, yolk, proteins, fat body, *Drosophila melanogaster* 6243

effects on molting, embryogenesis, *Armadillidium vulgare* 370.

effects on RNA biosynthesis, *Antheraea polyphemus* 3885.

effects on sexual reproduction, *Achea domestica*, *Drosophila melanogaster* 5820.

hemolymph, effects on melanization, pupation, *Deilephila nerii* 8094

hemolymph, effects on melanization, pupation, *Deilephila nerii* 8956.

hormones, effects on host searching behavior, oviposition, *Aedes aegypti* 5875.

induction, cell adhesion, cell lines, *Drosophila* 8060.

role, vitellogenesis, oogenesis, *Anopheles stephensi* 3511.

Hydroxymethylglutaryl-CoA reductase (NADPH),

inhibition, compactin, *Manduca sexta* 6558.

5-Hydroxytryptamine,

circadian rhythms, frontal ganglion, *Periplaneta americana* 8068

effects on mitochondria locomotion, malpighian tubules, *Rhodnius prolixus* 162.

effects on, smooth muscles, contraction, reproductive organs, *Tabanus proximus* 965

- Hydraphantes ruber**,
eye, ultrastructure, homology 86.
- Hygiene**,
cage, effects on maternal behavior, *Labidura riparia* 1146.
sanitation, vectors, disease transmission, tropical environment, *Culex pipiens* 1356.
- Hygrobatas fluviatilis**,
pollution effects, water pollution, colonization, artificial substrates, species diversity 1939.
- Hygrobia**,
environmental effects, humidity, *Cryptotermes* 5128.
- Hyla regilla**,
predators, effects on life history, population dynamics, *Drosophila melanogaster* 7065.
- Hylaeus**,
taxonomic revision, Australia 4749.
taxonomic revision, keys 4022.
- Hylastes opaculus**,
taxonomy, synonymy, *Hylastes rufipes*, *Hylastes salebrosus*, *Hylurgus scabripennis* 1596.
- Hylastes rufipes**,
taxonomy, synonymy, *Hylastes salebrosus*, *Hylastes opaculus*, *Hylurgus scabripennis* 1596.
- Hylastes salebrosus**,
taxonomy, synonymy, *Hylastes rufipes*, *Hylastes opaculus*, *Hylurgus scabripennis* 1596.
- Hylemya**,
food attractants attractancy, sex differences 485.
oviposition deterrents, pheromones, host plants, competition 5856.
parasites, host plants, oviposition deterrents 528.
- Hylemya antiqua**,
chemotaxis, *Allium cepa*, microorganisms, volatiles, synergism 230.
fitness, translocations, homozygotes, genetic factors 2330.
genetic control, Y chromosome translocations, embryos lethality 2316.
- Hylemya antiqua**,
catching methods, attractants, volatiles, *Allium cepa* 421.
cytogenetics, X radiation induction chromosome aberrations 9404.
food attractants attractancy, sex differences 485.
larvae, sense organs, morphology, chemotaxis, host plants orientation 913.
life cycle, emergence, reproduction, pest control 6143.
mating behavior, frequency 8249.
orientation, chemotaxis, anemotaxis, olfactory discrimination, *Allium cepa* 1239.
oviposition attractancy, dipropyl disulfide, EAG responses, *Hylemya antiqua* 3358.
oviposition, deterrents, plant extracts, *Thuja plicata* 4352.
oviposition stimulation, microorganisms effects on 1136.
oviposition stimuli, host plants seedlings microorganisms effects on 5860.
pesticide resistance, selection, population genetics 8665.
response, attractants, comparative studies 515.
trapping, baits, attractancy 3580.
- Hylemya betarum**,
morphology, synonymy, *Pegohylemya macra* 30.
- Hylemya brassicae**,
susceptibility, terbufos, insecticides, *Brassica oleracea botrytis* 717.
- Hylemya fugax**,
morphology, range extension, USA, Virginia 30.
- Hylemya platara**,
development, temperature effects on 8239.
food attractants attractancy, sex differences 485.
pests, traps 5619.
trapping, baits, attractancy 3580.
- Hylemya tenkora**,
new records, Iran 851.
- Hyles lineata**,
larvae, feeding behavior, effects on grasslands vegetation patterns 543.
pollinators, effects on host plants flowers color, *Aquilegia caerulea* 2834.
- Hylemya umbra**,
urticant apparatus, morphology 6515.
- Hylemya urticae**,
urticant apparatus, morphology 6515.
- Hyllobius**,
damage, susceptibility, lindane effects on, *Pinus sylvestris* 9315.
- Hyllobius abietis**,
infection, parasites, new species, *Novemila hyllobii* 8111.
parasites, life cycle, infection, malpighian tubules, *Gregarina hyllobii*,
Ophryocystis hyllobii 5726.
- Hyllobius pales**,
parasites, vectors, pathogens, *Macrocheles*, *Metarhizium anisopliae* 4207.
vectors, pathogens, *Metarhizium anisopliae*, *Macrocheles*, *Histiogaster anops* 6047.
- Hylboethynus**,
morphology, *Hylboethynus pontis*, keys, Brazil 4801.
- Hylboethynus pontis**,
new species, taxonomy, morphology, Brazil 4801.
- Hylcoicus pinastri**,
surveys, geographical distribution, Spain 3140.
- Hylotruxus haljalis**,
artificial diets, rearing, methodology 8014.
food consumption, wood, environmental effects 2000.
oviposition, fecundity, mating behavior 3527.
- Hylurgopinus rufipes**,
occurrence, abundance, pheromone traps, Canada 1183.
- Hylurgus scabripennis**,
taxonomy, synonymy, *Hylastes rufipes*, *Hylastes salebrosus*, *Hylastes opaculus* 1596.
- Hymenaea recurvula**,
larvae, pathogenicity, *Paceliomyces farinosus* 1001.
- Hymenocallis littoralis**,
food plants, antifedants, *Schistocerca gregaria* 7348.
food plants, antifedants, *Schistocerca gregaria* 7531.
- Hymenolepis citelli**,
infectivity, evolution, parasites, *Tribolium confusum* 8998.
- Hymenolepis diminuta**,
parasites, hosts immune response (humoral), *Periplaneta americana*, *Schistocerca gregaria* 1010.
- Hymenoptera**,
abundance, host-parasite interactions, *Metopolophium dirhodum*, *Sitobion avenae* 1228.
- Hymenoptera, (continued)**
association, host plants, pollination, *Minuartia groenlandica*, USA, New Hampshire, Mount Washington 5974.
check lists, species composition, British Isles, Isle of Man 6308.
colonial characteristics, sex ratio, queens effects on 3043.
colonies, population regulation, cannibalism, queens 1479.
comb construction, sheltering behavior 1477.
cyclics, chemical composition, organic compounds, USA, Colorado 107.
discrimination learning, color 5121.
evolutionary genetics, sex determination, diploidy, haploidy 1550.
flight traps 2484.
foraging behavior, flowers, prairies, USA, Wyoming 3564.
meiosis 8243.
parasites, natural enemies, *Scolytidae*, Israel 4372.
parasites, olfaction, odors hosts, *Dendroctonus frontalis* 4912.
parasites, spatial distribution, parasitism, *Choristoneura occidentalis* 2812.
parasites, venom effects on hosts development 502.
parasitism, *Gracillanidae*, survival 2135.
parasitism, population ecology, mortality, *Ladoga camilla*, British Isles, England 6009.
parasitoids, competition, *Diptera*, *Lepidoptera* hosts 1224.
parasitoids, competition, *Diptera*, *Lepidoptera* hosts 1225.
pollination, host plants, flowering, *Lomatium* 6785.
pollinators, species composition, *Helianthus annuus*, USA, Texas, Lower Rio Grande Valley 9155.
sampling methods, parasites, pupae, *Musca domestica*, *Stomoxys calcitrans* 8857.
sex ratio, evolution, population genetics 7058.
social organization, males, workers, evolution 3848.
social organization, reproductive strategy, workers, queens, mathematical models 3050.
social organization, sex ratio, kin selection 3048.
stings 664.
stings, association, toxic shock syndrome, man, *Staphylococcus aureus* 8416.
stings, hypersensitivity, immune response (cell-mediated), man 3654.
stings, hypersensitivity, man 1324.
stings, poison apparatus, glands, anatomy, comparison 5014.
stings, treatment, hyposensitization 2931.
stings, venom, immunoglobulin E, man 3699.
venom, effects on intracellular pressure, *Lepidoptera* 6884.
venom, hypersensitivity (immediate), immunotherapy, man 3700.
venom, hypersensitivity (immediate), immunotherapy, man 9254.
venom, hypersensitivity (immediate), man, immunotherapy 4484.
venom, immune response, man 1325.
venom, sensitivity, man 3677.
- Hypera**,
prev, collection, storage, predators, *Odynerus dilectus* 7524.
- Hypera males**,
catching methods, nets, motor vehicles 4088.
sampling equipment 8022.
- Hypera postica**,
activity patterns, host searching behavior, host plants effects on, *Medicago* 2055.
antennal sensilla, mechanoreceptors, mechanoreceptors, ultrastructure 3289.
check lists, predators, USA 3736.
dead larvae, *Zoothophora* incidence, measuring techniques 8010.
developmental stages, duration, mathematical models, algorithms 5628.
diapause, growth regulators, hydroprene, effects on development 1873.
flight activity, sensory stimuli 8061.
infestation effects on yield, *Medicago sativa* 6962.
insecticides, toxicity, comparison, efficacy 6624.
larvae, food organisms, predators, *Anthropoda* 1197.
pathogens, detection, methodology, *Zoothophora phytonomi* 4095.
pathogens, occurrence, seasonal variations, *Erynia phytonomi*, USA, Georgia 8154.
pests, biological control, predators 612.
pheromones, humidity effects on, pathogens, *Entomophthora phytonomi* 286.
spatial distribution, population levels, sampling methodology 5626.
temperature effects, occurrence, hatching, seasonal variations, Canada, Ontario 2775.
toxicity, insecticides, diflubenzuron, survival, body weight 7420.
- Hypera punctata**,
spatial distribution, population levels, sampling methodology 5626.
- Hyperbanus marmoratus**,
new species, morphology, taxonomy 1650.
- Hyperbaphus procer**,
new species, taxonomy, morphology, new species, *Schoenfeldtiopsis rikani* 7157.
- Hyperipidemia**,
octopamine, hemolymph, *Locusta migratoria* 174.
- Hyperodes bonariensis**,
genitalia morphology, sex differentiation 87.
pest resistance, host plants, *Lolium perenne* 6799.
seasonal variations, fatty acid composition, biochemical analysis 175.
- Hyperparasitism**,
Dendroctonus, *Acyrtosiphon* 4382.
host preferences, development, *Microterys flavus*, *Cheiloneurus paralia* 5185.
oviposition, development, *Microterys flavus*, *Marieta javensis* 5184.
oviposition, development, *Microterys flavus*, *Pachyneuron concolor* 5177.
oviposition, overwintering, *Lymene orbis*, *Langue reitor*, *Megalopyge opercularis* 3579.
oviposition, web spinning, *Signiphora coquilletti* 7543.
parasitoids, *Dimmockia incongrua*, *Arachnophaga dureicorpus*, *Megalopyge opercularis* 8311.
venom, effects on, paralysis, development, *Aphidius smithi*, *Asaphes lucens* 2820.
- Hyperphagia**,
food intake control, mechanoreceptors, *Culiseta inornata* 3312.
- Hypersensitivity**,
atopic dermatitis, man, *Dermatophagoides farinae* antigens 8405.
bites, man, *Triatoma infestans*, *Dipetalogaster maxima* 1375.
bites, *Siphonaptera*, *Canis familiaris* 2910.
deoxyribonuclease I sites, identification, association *Sgs4* gene, DNA, 5-terminus, *Drosophila* 6250.
immunotherapy, antigens, organ culture, *Triatoma protracta* 4522.
man, immunotherapy, *Triatoma protracta* 4521.
man, *Lymantria dispar* 9235.
man, seasonal variations, respiratory tract, *Dermatophagoides farinae* 1323.
mutants, chromosome 3, methylmethanesulfonate, mustard, *Drosophila melanogaster* 3097.

Hypersensitivity (continued)

parasites, antigens, skin tests, *Canis familiaris*, Siphonaptera 8406
 population studies, man, Apidae venom, Australia 9266
 stings, immune response (cell-mediated), man, Hymenoptera 3654
 stings, man, Hymenoptera 1324
 treatment, oral administration, Dermatophagoides pteronyssinus sensitization, man 8434

Hypersensitivity (immediate)

immunotherapy, venom, man, Hymenoptera 9254
 lymphocytes, immunoglobulin E response, man, Dermatophagoides farinae 6055
 man, allergens, Cladotanytarsus lewisii, Sudan 1370
 man, Apis venom, hypersensitization 6053
 man, immunoglobulin E serum levels, Sarcoptes scabiei 4485
 man, venom, immunotherapy, Hymenoptera 4484
 venom, man, immunotherapy, Hymenoptera 3700

Hypertrophy

salivary gland, infection, Glossina pallidipes, Kenya 8141
 salivary gland, virus-like particles transmission, Glossina pallidipes 8140

Hypelxilis pallida

host plants, geographical distribution, USA, Texas 1944

Hyphantria cunea

females, dispersal, survival, oviposition, nuclear polyhedrosis virus marking 2838

mating behavior, flight activity, sex pheromone 3528
 morphology, difference, comparison, Spilosoma menthastri, Spilosoma urticae 89
 natural enemies, Exostis japonica 610

Hyphantus

new species, taxonomy, morphology, 8 species 6361

Hyphora alpina

rare species, new records, geographical distribution, Sweden 4723

Hyphoridius

taxonomic revision, new species, 13 species, morphology, identification keys 4816

Hyphydrus ovatus

new records, geographical distribution, dimorphism, females, Finland 7895.

Hyphopie aculeifer

food organisms, predators effects on, Chernes climacoides 1265

Hyphochloa alba

antennal sensilla, morphology, distribution 8072

Hyphocysta adiantae

pupae, development, host plants distribution, Themeda australis, Imperata cylindrica, Didactylus didactyla 1244

Hyphodidae

taxonomy, morphology 2383.

Hypoderma

development, ultrastructure, oocytes 5096.

Hypoderma bovis

cattle parasites, sampling methodology 1681.

Hypoderma lineatum

cattle parasites, sampling methodology 1681.

collagenase, crystallization, structure 8087

pest control, cattle, insecticides efficacy 2172.

pest resistance, immune response, cattle 6882

Hypodermatidae

venom, poisoning, man 8183.

Hypogastrura punctata

new species, morphology, USA, Pennsylvania 3136.

Hypogastrura tulbergi

fat body, ultrastructure, physiology, molting 4281.

Hypogastrura vernalis

association, nutrient levels, Drosera erythrorhiza, Australia 7555.

Hypophaea pungens

new species, morphology, host plants, Alternanthera pungens, Argentina 1639.

Hypolithus bicolor

larvae, traps, bait, seasonal variations, activity 56.

Hypolixus nubilosus

life cycle, oviposition, host plants, Amaranthus caudatus, Egypt 6730.

Hypoosca umbrosaria

morphology, larvae, pupae 5644.

Hypoonedon klapperichi

new species, Jordan 3187.

Hypopi

development, molting, Hemisarcophaga coccophagus 7435.

Hypoensitization

man, Apis venom hypersensitivity (immediate) 6053.

treatment, stings, man, Hymenoptera 2931

Hypoosoter exiguae

infection, pathogens, Neoplectana carpocapsae 1804.

parasitoids, hosts diets toxins, Heliothis zea 3578.

Hypothenemus hampei

susceptibility, insecticides, pest control 8199.

Hyaspia robusta

genitalia morphology, males, females 90.

pupae, morphology, sex determination 78.

Hypoprorora capitulata

new species, taxonomy, morphology, Brazil, Minas Gerais 6420.

Hypoprorora expansa

new species, taxonomy, morphology, Brazil, Minas Gerais 6420.

Hypoprorora serrata

new species, taxonomy, morphology, Brazil, Minas Gerais 6420.

Hyptiotes himalaensis

new species, taxonomy, morphology, India 3172.

Hyppurus bertrandi

life history, host plants, Portulaca oleracea 6728.

Hyrcanus

taxonomic revision, classification systems 4860.

Hyrcanus thymus

parasites, hosts, Pinus banksiana, new records, USA, Maine 2057.

Hysteris

proteins, biochemical analysis, Oncomeloides fasciatus 1756.

Hystriochyella dippei spinata

nuge extension, parasites, Mammalia, USA, Alaska 5530.

Iberia peninsula

zoogeography, check lists, species composition, Tipulidae 9469.

Iberian Peninsula

new records, geographical distribution, Scolitantides orion, Cupido minimus,

Eurhydryas delatoni, Mimus ulae, Hemans uyus 7078.

new records, geographical distribution, Xylota lunifera 7077.

population genetics, sex determination, sex chromosomes, Pycnogaster cucullata

7055

taxonomic revision, morphology, Ecnocnidae 6445.

Ice

sediments, benthos, overwintering, Tricoptera, Chironomidae, Sweden, Vindelaven

R 3648.

Icerya purchasi

morphology, adults, identification 1722.

Icerya seychellarum

mouthparts, penetration, host plants, Aldabra Atoll 4395.

Ichnemonidae

geographical distribution, species richness, abundance, latitude 1966.

parasitoids, species composition, larvae, Plutella maculipennis 9139.

pollination, Listera ovata, Sweden 5204.

taxonomic revision, synonymy, morphology 4870.

Ichnemoninae

surveys, check lists, species diversity, Belgium 6324.

Icius hamatus

life history, geographical distribution, mating behavior 4331.

Identification

adults, morphology, vectors, Simulium squamosum 869.

africanized honeybees, population studies, enzymes, electrophoresis, Apis

melifera 8026.

analysis, allzymes, morphology, Apis mellifera 53.

biometrics, comparative studies, Trichogramma 1707.

blood meals, enzyme-linked immunosorbent assay, Culicidae 3662.

collections, Insecta 3960

developmental stages, body length, Phasmoda 6494.

eggs, morphology, coloration, Rhodius 4099.

genera, morphology comparison, larvae, 7 species, Sisyridae 1710.

Insecta, USA, South Dakota 2940.

juvenile hormones, Locusta migratoria migratorius 2584.

juvenile hormones, Thermobia domestica 3337.

keys, adults, instars, Jalysus spinosus, Jalysus wickhami 3947.

keys, Alloscopus 3988.

keys, Aphodinae, Africa 2395.

keys, Atractomorpha, China, People's Rep. 2475.

keys, Ennominae, Canada 5654.

keys, Eostegana, Philippines, Papua New Guinea 3989.

keys, Haemaphysalis cooley, South Africa 3259.

keys, Holcostethus, North America 4941.

keys, Liatronotus, North America 6379.

keys, Meranoplus, Dicranospis, Calpomyrmex 1652.

keys, morphology, Anopheles, Thailand 6479.

keys, morphology, Diptera, British Isles 3258.

keys, morphology, Ectoninae, Mexico 6325.

keys, morphology, Hyphydrus 4816.

keys, morphology, larvae, Agabus 8041.

keys, morphology, Medetara ruficornis, Hercostomus quadifiliatus 6499.

keys, morphology, nymphs, Cicadelloidea, Europe 4935.

keys, morphology, Odonata, New Zealand 6503.

keys, morphology, Oedaleus 1670.

keys, morphology, Pepsysena 4857.

keys, morphology, Rhyacophilidae, Canada 6462.

keys, morphology, species, Scenoporus, Metatrachia, Stenomptirale, Israel 5650.

keys, morphology, Sphodrus, Nepal 808.

keys, morphology, 8 species, Paraedra, Oriental Region 6410.

keys, new genera, Xestiodon, Neotropical Region 4776.

keys, Oligella, Sweden 3977.

keys, Paraboloipinae 1640.

keys, Paraleucopis, Mexico, California Gulf 2425.

keys, Pentatomidae, North America 5809.

keys, Platytytus, Panama, Porto Bello 4848.

keys, Pompilus 834.

keys, Pristiphora compressa, Pristiphora pallida, Pristiphora wesmaeli, British

Isles 5646.

keys, Pseudostegana, Papua New Guinea, Philippines 3990.

keys, records, geographical distribution, Australia 1582.

keys, Schoenogasteria, larvae, Papua New Guinea 4763.

keys, Sharliphora, Czechoslovakia 4875.

keys, species, Dicranocentrus, Nepal, India 6387.

keys, species, Minymyscha, Pseudolopyga 6441.

keys, species, Tyrellia 2495.

keys, taxonomic revision, Aedes scutellaris, Tonga 6406.

keys, taxonomic revision, Ectalcidion 4780.

keys, taxonomic revision, Neosilba 4702.

keys, taxonomic revision, Trichonyssodry, Brazil 4778.

keys, taxonomy, Dytsicidae, Brazil 809.

keys, taxonomy, revision, Archipococcus ghesquieri, Africa 848.

keys, taxonomy, revision, Janomima dannfeldti, Africa 840.

keys, Trichogramma, USA, Hawaii 4021.

keys, workers, morphology, Formica rufa, Sweden 4106.

keys, 3 species, Acanthoscelidae, Hungary 3932.

larvae, morphology, Ephemeroptera, North America 2498.

morphology, Ablabesmyia janta, USA, Texas, Village Creek 4107.

morphology, adults, Icerya purchasi 1722.

morphology, eggs, Callosobruchus, Caryedon, Acanthoscelides, Zabrotes 5641

morphology, geographical distribution, Nonarthra cyaneum, Panama 7126.

morphology, Spermophagus sericeus, Spermophagus calystegiae 8884.

morphology, taxonomy, ecological distribution, Oecetis disjuncta, Oecetis avara

8004.

morphometry, wings, Nilaparvata lugens, Sogatella furcifera 5640

nuclear polyhedrosis virus, infection, Spodoptera exigua 1823.

parasites, man, Insecta, Arachnida 8423.

pathogens, Trypanosomatidae, Insecta 5032

poultry infestation, Ornithonyssus bursa, Philippines 2925.

predators, electrophoresis; serological tests, Eldana Saccharina 2110.

prey, predator-prey interactions, precipitin test, Lepidoptera 1690.

sex determination, morphology, Cyndrocorpus aspersus 1706.

sex differences, morphology, Ips tyrographus 7274.

Subject Index

Identification, (continued)

- sex differences, morphology, *Rhyzopertha dominica* 870.
species, comparison, morphology, genitalia, *Apotomis semifasciana*, *Apotomis infida* 82.
species composition, sex pheromone, *Ostrinia furnacalis*, *Ostrinia nubilalis*, China, People's Rep., Henan Province 3750.
species, electrophoresis, morphology, *Xestia* 68.
species, enzymes, blood meals, man, *Simulium damnosum* 7326.
species, enzymes, *Simulium*, West Africa 2568.
species, sex determination, methodology, *Coleoptera* 1696.
systematics, taxonomy, enzymes, *Aphis fabae* 7206.
taxonomy, agricultural practices, medical importance, *Insecta*, Africa 3782.
taxonomy, collections, *Insecta*, Kenya 3175.
taxonomy, collections, *sta*, *Insecta*, Malawi 3174.
taxonomy, *Insecta*, Africa 3179.
taxonomy, morphology, *Pseudomethoca proginqua*, USA, Montana 4295.
taxonomy, status, economics, *Insecta*, Africa 3176.
taxonomy, status, *Insecta*, Africa 3178.
taxonomy, status, *Insecta*, Egypt, Arab. Rep. 3177.
trail pheromone, Dufour's gland, *Solenopsis invicta* 2597.
wings morphology, *Aphelinus*, *Mesidia*, *Mesidiopsis* 4108.
- Idiomycetus**,
new genera, *Mascarenes* 4864.
- Idiomycetus simus**,
new species, *Mascarenes* 4864.
- Idiopis opaca**,
new species, taxonomy, morphology, South America 7949.
- Idiostegalla quadrisignata**,
new species, Nepal 1609.
- Idosa murrayae**,
new species, taxonomy, morphology, Costa Rica, Cocos I. 7981.
- Idrini**,
taxonomy, morphology 4035.
- Idrusa nyctilus**,
biogeography, speciation, phylogeny 7881.
- Iguanacarus**,
parasites, taxonomic revision, marine organisms 9.
- Iguanacarus alexandri**,
new species, parasites, marine organisms 9.
- Iguanidae**,
hosts, parasites, *Iguanacarus* 9.
- Iguassuoides lucidus**,
new species, taxonomy, morphology, Brazil 8738.
- Ilerylon**,
new genera, taxonomy, morphology, *Mascarenes* 4813.
- Illinoia pepperi**,
chemical control, insecticides, blueberry shoestring virus vectors 8458.
disease control, vectors, blueberry shoestring virus, insecticides 4630.
- Illumination**,
effects on light traps efficacy, *Chrysoperla carnea* 3011.
- Ilybius angustior**,
larval, morphology, life history, Sweden 3986.
- Imaginal disc**,
regeneration patterns, genetics, *Drosophila* 4252.
- Imaginal discs**,
cell lines, wings, protein biosynthesis, *Trichoplusia ni* 8896.
differentiation, *Drosophila melanogaster* 1081.
differentiation, regulation, *Drosophila* 335.
enzymatic activity, aldehyde oxidase, histochemistry, *Drosophila* 955.
humors, differentiation, histology, *Drosophila melanogaster* 331.
isocitrate dehydrogenase (NADP⁺), tissues distribution, *Drosophila melanogaster* 392.
mutation, duplication patterns, *Drosophila melanogaster* 767.
mutation, morphogenesis, patterns formation 762.
protein biosynthesis, *Drosophila melanogaster* 3507.
transdermination, *Drosophila* 338.
transplantation, malpighian tubules development, *Galleria mellonella* 6632.
wound healing, patterns regulation, ultrastructure, *Drosophila melanogaster* 341.
- Imidocarb dipropionate**,
livestock infection, pest control, *Theileria* sergenti, *Babesia bigemina* 3682.
- Imidocarb dipropionate**,
chickens, disease transmission, *Babesia bigemina*, *Boophilus decoloratus* 6064.
- Immature stages**,
Acanalonia bivittata, *Acanalonia conica*, life history, laboratories 1984.
Bruchomorpha oculata, morphology, rearing, laboratories 1717.
Chironomidae, food organisms, fry, *Oncorhynchus kisutch* 2131.
development, diet, *Diatraea grandiolella* 1748.
growth regulators effects on, BAY SIR 8514, *Musca domestica* 8237.
life history, *Anomomis septentrionalis*, *Melica pini*, *Ormenoides venusta*, laboratories 1985.
life history, *Dimorpha amphibia boreo* 1955.
morphology, biology, *Dioryctra taeda*, *Dioryctra taeda* 2503.
morphology, *Cibronia laeocoma*, Brazil, Sao Paulo 6492.
morphology comparison, larvae, 7 species, *Sisyndes* 1710.
morphology, *Culicoides homotomus*, China, People's Rep., Zhejiang Province 2502.
morphology, *Dysademonia boreas*, Brazil 6484.
morphology, *Erythroneura polyxena polyxena* 8874.
morphology, life history, *Megamelus davisii*, parasites 1987.
morphology, *Parasarcophaga crassipalpis*, *Parasarcophaga omega*, *Tricholopocrypta beta*, *Tricholopocrypta impatiens*, *Tricholopocrypta tryoni*, *Tayloromyia iota*, *Boettcheria pergrina*, Australia 2504.
morphology, *Ricinoides westermanni*, Ivory Coast 7156.
morphology, *Scirpus cinctus cinctus*, USA, Illinois 8292.
morphology, *Stobaea tricarinata* 6491.
morphology, *Trichogramma brevicapillum* 7422.
population density, mortality, *Diaphana nitalidis*, *Cucumis sativus*, parasitism, *Trichogramma caryopum*, *Apanteles*, *Solanopsis* 397.
water temperature, effects on development, survival, *Anopheles culicifacies*, Pakistan, Punjab Province 6697.
- Immatures**,
morphology, biometry, *Nasutitermes aquilinus*, Brazil 8869.
- Immigration**,
colonization, light effects, crop protection barriers, behavior, *Myzus persicae* 1172.
diapause, life cycle, *Agrotis ipsilon*, USA, Iowa 5900.

Immigration, (continued)

- recolonization, islands, salt marshes, biogeography, *Arthropoda*, USA, Florida Coast 5264.
- Immunobilization**,
larvae hemolymph hormones effects on, *Sarcophaga bullata* 204.
methodology, equipment, *Culicidae* 7255.
- Immunobilized enzymes**,
Photinus luciferin 4-monooxygenase (ATP-hydrolysing), kinetics, stability, *Luciola marginella* 8934.
- Immune response**,
antibacterial agents, proteins, *Hyalophora cecropia*, *Escherichia coli* 203.
bacteria diseases, pathogenesis 7374.
hemolymph, pathogenicity, *Bacillus cereus*, *Galleria mellonella* 5720.
hosts, parasites, *Drosophila ummatus*, *Aedes trivittatus* 1031.
Hyalophora cecropia pupae, *Enterobacter cloacae* infection 5038.
infection, pathology, *Nomuraea rileyi*, *Spodoptera frugiperda* 1806.
infestation, *Lepidoptera*, *Ornithodoros moubata* 6881.
Insecta, self-assessment, role hemocytes 6604.
man, venom, *Hymenoptera* 1325.
man, venom, toxins, reviews, *Arthropoda* 5764.
neurological complications, man, new records, bites, *Ixodidae* 8411.
pest resistance, cattle, *Hypoderma lineatum* 6882.
- Immune response (cell-mediated)**,
man, hypersensitivity, stings, *Hymenoptera* 3654.
- Immune response (humoral)**,
agglutination, parasites, *Hymenolepis diminuta*, *Periplaneta americana*, *Schistoecra gregaria* 1010.
infestation, guinea-pigs, *Ixodidae* 9260.
- Immune system**,
antibacterial activity, cecropin B, cecropin D, *Antheraea pernyi* 8952.
- Immunoglobulins**,
heavy chains, switch regions, cDNA, nucleotide sequence, *Drosophila* 6251.
- Immunity**,
antibody response, man, *Ixodidae* 3701.
cobra venom factor effects on, *Galleria mellonella* 1071.
gram-negative bacteria, antibacterial agents, *Galleria mellonella*, *Hyalophora cecropia* 1818.
hemolymph, effects on ultrastructure, *Pseudomonas aeruginosa*, *Galleria mellonella* 8134.
host-parasite interactions, *Cavia*, *Amblyomma americanum* 1232.
hosts, pathogens, *Neoplectana carposcapae*, *Hyalophora cecropia* 2641.
infestation, guinea-pigs, *Amblyomma americanum*, *Rhipicephalus sanguineus* 6883.
role, reticulo-hemopoietic tissue, *Bacillus thuringiensis*, *Locusta migratoria* 4192.
- Immunization**,
infection, mice, Venezuelan equine encephalitis virus, *Aedes aegypti* 7626.
- Immunosorption**,
purification, edysteroids, methodology, *Insecta* 58.
- Immunosays**,
dengue virus antigens detection, association *Aedes albopictus* 8166.
RNA polymerase II, *Drosophila melanogaster*, *Chironomus thummi* 2586.
- Immunohistochemistry**,
antigens, *Dermatophagoides farinae*, *Sarcoptes scabiei* 1381.
hemolymph, clotting, *Leucophaea maderae* 4147.
histology, digestive tract epithelium, *Periplaneta americana* 925.
histology, neurons, neurosecretion, *Locusta migratoria* 901.
localization, pancreas proteins, brain, *Eristalis aeneus* 2523.
markers, central nervous system development, embryos, *Drosophila* 8913.
peptides, characterization, brain, *Calliphora vomitoria* 2531.
physicochemical properties, antigens, allergens, *Dermatophagoides farinae* 1368.
vitellogenesis, antibodies, proteins distribution, *Locusta migratoria* 1133.
- Immunodiffusion**,
lipoproteins, hemolymph, *Locusta* 1767.
- Immunoelectrophoresis**,
lipoproteins, hemolymph, *Locusta* 1767.
- Immunofluorescence**,
dengue virus antigens detection, association *Aedes albopictus* 8166.
dengue virus detection, experimental infection, *Toxorhynchites splendens* 8167.
gene mapping, polypeptide chromosomes, *Drosophila melanogaster* 8632.
gonads differentiation, histology, *Drosophila* 1080.
proteins, immunohistochemistry, vitellogenesis, *Locusta migratoria* 1133.
- Immunoglobulin E**,
man, stings, *Hymenoptera* 3699.
response, lymphocytes, hypersensitivity (immediate), man, *Dermatophagoides farinae* 6055.
serum levels, hypersensitivity (immediate), man, *Sarcoptes scabiei* 4485.
- Immunoglobulins**,
infection effects on, man, *Sarcoptes scabiei* 8404.
- Immunological aspects**,
pathology, host-parasite interactions, *Sarcoptes scabiei* 3671.
storage proteins, *Dacus oleae* 2579.
- Immunology**,
cell lines, clones, *Drosophila melanogaster* 2513.
development, *Drosophila melanogaster* 3502.
digestive tract, enzymatic activity, NADPH-cytochrome reductase, *Spodoptera eridania* 1758.
NADPH-cytochrome reductase, cross-reactivity, *Spodoptera eridania*, Insecta 1768.
protein composition, blood meals, digestive tract, *Dermacentor andersoni* 4997.
scabies, man, case reports, *Sarcoptes* 3691.
- Immunotherapy**,
anaphylaxis, stings, man, *Insecta* 7635.
hypersensitivity, antigens, organ culture, *Triatoma protracta* 4522.
hypersensitivity (immediate), venom, man, *Hymenoptera* 3700.
hypersensitivity (immediate), venom, man, *Hymenoptera* 4484.
hypersensitivity (immediate), venom, man, *Hymenoptera* 9254.
hypersensitivity, man, *Triatoma protracta* 4521.
immunoglobulin E response, lymphocytes proliferation, man, *Dermatophagoides farinae* 6055.
man, venom, sensitivity, case reports, *Insecta* 3686.
- Immunotherapy**,
man, asthma, *Dermatophagoides farinae* 2174.
- Imparipes comatosus**,
new species, taxonomy, morphology, Poland 4761.
- Imparipes histricinus**,
mating behavior, copulation 6670.

- Imparipes parapecolisimilis**,
new species, taxonomy, morphology, Poland 4761
- Impatiens**,
pest resistance, horticulture, *Tetranychus urticae* 5199.
- Impatiens capensis**,
pollinators, nectar dispersion 6793
- Impatiestium americanum**,
new species, taxonomy, morphology, Mexico 4863
- Imperata cylindrica**,
association, mycorrhizas, Tetraeneura, India 7802
host plants, pupae distribution, *Hypocysta adiantae*, *Xoia arctus* 1244.
- Imported diseases**,
disease transmission, exanthematous typhus, man, case reports, *Rhipicephalus sanguineus* 1332
malaria, man, Anopheles, Europe 4487
- Imprinting**,
attachment, queens, *Vespa orientalis* 745
- Inachis io**,
food organisms, predation, feeding behavior, *Muscicapa striata* 6823.
- Inactivation**,
skeletal muscle, physiology, calcium, *Carausius morosus* 4124.
- Inbreeding**,
age composition, diploidy, *Melipona quadrifasciata* 9032
effects on colonial characteristics, survival, *Apis mellifera* 1548
effects on eggs hatchability genetic load, *Lepidoptera* 7877
effects on fitness, drones, *Apis mellifera* 4697
genetics, chromosomes, nondysjunction, *Drosophila melanogaster* 6257.
genetics, recombination, *Drosophila melanogaster* 7032
nondysjunction chromosomes, sex differences, *Drosophila melanogaster* 4679
population genetics, islands, *Drosophila algonquin*, USA, Maine Coast 9435
selection, effects on mating behavior, *Drosophila melanogaster* 5485
- Inciditermes schwartzi**,
linkage, enzymes loci, sex chromosomes, characterization 2300
translocations, sex-linkage 3077
- Incompatibility**,
cytoplasm, hybrids, pathogens, *Aedes polynesiensis*, *Aedes kesseli* 5488
nests, recognition pheromones, colonial characteristics, *Pseudomyrmex ferrugineus* 7799
- Incorporation**,
cholesterol, ecdysteroids, ovary, eggs, oogenesis, *Schistocerca americana* 211
lipids, fatty acid composition, *Triatoma infestans* 192
thymidine, DNA biosynthesis, diazepam effects on, *Stomoxys calcitrans* 1512.
- Incubation**,
eggs, environmental effects, *Pyrrhia perpusilla* 4259.
electronic equipment, bioassays, insecticides, field trials, *Lygus hesperus*,
Acyrtosiphon pisum 8015.
- India**,
activity patterns, diel variations, *Earias vittella*, *Diacrisia obliqua*,
Spodoptera litura, *Heliothis armigera*, *Cilo paretillus* 9100.
activity patterns, seasonal variations, *Scarabaeidae* 5255
agricultural lands, pests, geographical distribution, *Agrotis ipsilon* 5367.
Aphididae prey, predators, *Coleoptera*, *Diptera* 4417
aquatic organisms, parasites, commensals, lakes, *India* 7022
association, mycorrhizas, Tetraeneura, *Imperata cylindrica* 7802
biology, morphology, taxonomy, reviews, *Isoptera* 5427.
bionomics, pests, infestation, cattle, *Cenophthalmus felis orientis* 8427.
chemical control, pest control, *Agrotis ipsilon* 5375.
chemical control, pest control, crop fields, yield, *Agrotis ipsilon* 7723.
chromosome number, diploidy, chromosome B, *Sonthonoxia maenas* 7036.
chromosomes, karyotypes, *Crinocraspida torrida*, *Dendrolimus hirtica*, *Taragama siva* 5468.
chromosomes, karyotypes, *Diaplys gladiator*, *Diaplys rufescens* 7035.
colonial characteristics, swarming behavior, nesting behavior, soil, *Isoptera* 5426.
colonies, brood care, population density, seasonal variations, *Isoptera* 5418.
crop protection, pest control, pests, check lists, *Manihot esculenta*, *Insecta* 4620.
crop protection, pests, biological control, *Zea mays*, *Chilo paretillus* 2958.
cytology, heterochromatin, chromosomes, *Gastromyrmex africanus orientalis* 3898.
disease transmission, Nematoda, *Hyalomma anatolicum*, *Boophilus microplus* 2183.
ecological distribution, geographical distribution, soil, *Aphididae* 5258.
elimination, man, *Scarabaeus*, live *Onthophagus* 9258.
emergence, diurnal variations, pests, *Chilo paretillus* 5135.
feeding behavior, diets, *Tadania aegyptiaca thomasi*, *Insecta* 5221.
foraging behavior, annual variations, environmental factors, *Odontotermes wallonensis* 4347.
fruit trees infestation, damage, *Carpomyia vesuviana*, *Dacus zonatus* 5332.
fruit trees pests, life history, *Nippo lachnus* piri 4554.
fruit galls, infestation, *Eriophyes prosopidis*, *Prosopis cineraria* 3591.
galls, infestation, *Phytomyza palustris*, *Zizyphus jujuba* 6798.
galls, natural enemies, *Procecidochares utilis*, *Braccon*, *Eurytoma* 3615.
geographical distribution, new records, *Antomyia* 7913.
geographical distribution, new records, *Botocudo frugivorus*, *Botocudo signanda* 7911.
geographical distribution, range extension, morphology, *Micromus timidus* 7111.
geographical variations, susceptibility, endotoxins, *Bacillus thuringiensis*,
Anopheles stephensi, *Aedes aegypti*, *Aedes albopictus* 8993.
identification keys, species, *Dicranocentrus* 6387.
intraspecific hybridization, heterosis, population genetics, *Drosophila annasae* 3915.
karyotypes, *Tinocallodes montanus*, chromosomes 7842.
Lamoria heni, taxonomy, new species, morphology 1663.
malformations, wings, venation, *Cispa* 6505.
malformations, new records, geographical distribution, *Adactynus* 7275.
morphology, polymorphism, *Shivaphis celti*, *Myzus varians* 6513.
new genera, new species, soil fauna, *Claudoviana miranda*, *Monelata incispennis*,
Basalys, 6 species 4883.
new genera, new species, taxonomy, *Eriophyoidea* 7138.
new genera, new species, taxonomy, morphology, *Pseudoscybaris kempi* 7158.
new genera, 3 genera, new species, 9 species, taxonomy, morphology, *Aradidae* 4859.
new records, geographical distribution, *Aphididae* 4734.
new records, geographical distribution, *Aphididae* 7909.
new records, geographical distribution, *Aphididae* 8688.
new records, geographical distribution, *Nalepellidae* 7411.
new records, geographical distribution, taxonomy, morphology, females,
- India, (continued)**
Dendrolimus benderi 4739
new records, geographical distribution, *Tetranychoidae* 7910.
new records, parasites, *Aneristis ceroplatas*, hosts, *Coccus hesperidum*, *papaya* 2040.
new species, association, crop fields, *Tetranychoidae* 8716.
new species, morphology, taxonomy, *Abraeomorphus topali* 2393.
new species, morphology, taxonomy, *Anarsia achrasella* 2465.
new species, morphology, taxonomy, *Athenega*, *Acrotacheta* 822.
new species, morphology, taxonomy, pests, *Megastelia sandhu* 823.
new species, morphology, taxonomy, *Phyllocolpa* 3964.
new species, morphology, taxonomy, *Sukunahiksha populi* 3180.
new species, morphology, taxonomy, *Vaghia blascovi* 2380.
new species, new genera, *Jessopocoris*, *Jessopocoris acutellatus* 4851.
new species, new genera, taxonomy, morphology, *Anupama himalayensis* 7208.
new species, new records, *Alticinae* 7160.
new species, new records, *Euphyrs evae*, *Chalcosircus martensi*, *Sitticus* 4809.
new species, new records, *Fergusonia sylvigii* 4831.
new species, *Prochirus lankus*, *Thoracochirus decanus*, *Paoderus besucheti*,
Paoderus loebli, *Paoderus missardi* 4809.
new species, taxonomy, morphology, *Areneus* 2378.
new species, taxonomy, morphology, *Asilidae* 7184.
new species, taxonomy, morphology, *Asynbius beneficus* 7169.
new species, taxonomy, morphology, *Cephaeta hayati* 2462.
new species, taxonomy, morphology, *Drosophila brahmajeniensis*, *Drosophila bhagamandalensis* 7174.
new species, taxonomy, morphology, *Drosophila neokurokawai* 7175.
new species, taxonomy, morphology, *Epitranus* 8816.
new species, taxonomy, morphology, *Encydnus beneficus* 7207.
new species, taxonomy, morphology, *Eriophyidae* 7133.
new species, taxonomy, morphology, *Hypotites himalayensis* 3172.
new species, taxonomy, morphology, new records, *Rhynchophytoidae* 7134.
12 new species, taxonomy, morphology, *Notopodinae* 7136.
new species, taxonomy, morphology, parasites, *Cephaeta hayati* 4872.
new species, taxonomy, morphology, *Rhopalosiphum chreus* 7198.
new species, taxonomy, morphology, *Stenopogon*, *Michotamia* 7179.
new species, taxonomy, morphology, *Tetralopha kalyani*, *Tetra lancaensis* 7137.
new species, taxonomy, morphology, *Teinocoptes brevis* 8726.
5 new species, taxonomy, morphology, *Teuipalpus* 8715.
new species, taxonomy, morphology, 6 species, *Phantasia* 4808.
new species, taxonomy, morphology, 9 species, *Cyrtus* 4810.
new species, taxonomy, *Phyllopterus joesphi*, *Sycosapter hirticola* 8830.
new subspecies, taxonomy, morphology, *Carcinopygia lichenigera nuytiana* 4045.
nomenclature, taxonomy, type specimens, *Rhynchos* 7192.
parasites, digestive tract, *Holproctynus ramidigius*, *Agriocnemes pygmaea* 1000.
parasites, hematophagy, effects on blood, *Bubalis bubalis*, *Haeematopis tuberculatus* 5380.
parastoids, new species, taxonomy, *Aphididae* 7213.
pathogens, *Ramipcephalus olivaceus*, *Cerignone olivaceum* 282.
pest control, allitin, *Pectinophora gossypiella*, *larvae*, *Heliothis armigera* 7701.
pest control, chemical control, insecticides, larvae, *Malacosoma indica* 1449.
pest control, crop fields, agricultural practices, arid zones, *Insecta* 5401.
pest control, damage, *Isoptera* 5369.
pest control, predators, *Megadema lyra lyra*, *Insecta* 5214.
pest control, predators, *Musca domestica*, *Acridotheres ginguianus* 7681.
pest outbreaks, crop fields, damage, *Mythimna separata*, *Scalce cereae* 6925.
pest outbreaks, crop fields, *Deudorix epijarbas* 5315.
pest outbreaks, crop fields, *Saccharum officinale*, *Scarabaeidae* 5361.
pest outbreaks, damage, *Gossypium*, *Malacocneme* 7733.
pest outbreaks, factors affecting population decline, parasites, viruses,
Mythimna separata 5301.
pests, chemical control, insecticides, seed treatments, *Triticum*, *Microtermes obesi* 5398.
pests, crops damage, *Pisum*, *Malenagromyza phaseoli* 9336.
pests, host plants association, *Athenega*, *Acrotacheta* 4557.
pests, host plants infestation, *Cydia psychora*, *Arachis hypogaea* 6948.
pests, infestation, life cycle, *Rhopalosiphum maidis*, *Zea mays* 9338.
pests, natural enemies, parasites, *Chaenusa*, *Hydrellia philippina* 7673.
pests, natural enemies, surveys, *Aphis craccivora*, *Lipaphis erysimi* 6943.
pests, natural enemies, surveys, *Myzus persicae*, *Spodoptera litura* 6926.
pests, parasites, natural enemies, *Malacosoma indica* 6768.
pests, population dynamics, host plants, *Brassica*, *Lipaphis erysimi* 7776.
pests, succession, population growth, *Oryza sativa*, *Insecta* 7783.
plantations, damage, arid zones, *Isoptera* 6210.
plantations, damage, *Odontotermes gudipurensis*, *Odontotermes obesus*, *Eucalyptus* 7700.
population dynamics, dispersal, survival, disease transmission, *Anopheles culicifacies* 1296.
population studies, pesticide resistance, *Anopheles culicifacies* 3131.
populations, parasites, *Aphididae* 4416.
public health, *Salmonella* isolation, *Blattidae* 6076.
salivary gland chromosomes, karyotypes, pests, *Malenagromyza obtusa* 5466.
Stilobezzia enistylus, new species, taxonomy, *Alluaudomyia fuscicornis*,
Stilobezzia enistylus 4000
surveys, *Aphididae* 7110.
surveys, species composition, distribution, *Insecta* 7908.
taxonomy, taxonomy, *Drosophilidae* 784.
taxonomy, geographical distribution, *Oribatei* 7151.
taxonomy, morphology, *Asilidae* 4001.
taxonomy, morphology, *Geocoroides* 7193.
taxonomy, morphology, keys, *Dirhininae* 7212.
taxonomy, morphology, keys, *habitus*, *Monanus* 7161.
taxonomy, morphology, keys, *Leucospis* 7216.
taxonomy, morphology, new records, *Naphilius* 7194.
taxonomy, morphology, new species, *Macropsinae* 4861.
taxonomy, morphology, new species, *Noeperta* 7240.
taxonomy, morphology, new species, new genera, *Rhynchocnema* 7172.
vectors, disease transmission, *Phenax encephalis*, *Culex pseudovishnui*,
Culex tritaeniorhynchus, *Culex bitaeniorhynchus* 2937.
wood damage, urban environment, feeding behavior, *Coptotermes kishori* 1405
- India, Aligarh**,
new records, mutants, *Culex pipiens fatigans* 3904.
- India, Andhra Pradesh**,
new records, predators, pests, *Spodoptera litura*, *Araneae* 1439.

Subject Index

- India, Assam**, surveys, geographical distribution, Culicidae 782.
- India, Bangalore**, capture-recapture studies, *Eucelatoria armigera*, parasites, hosts, *Heliothis armigera* 2159.
- India, Bhutan**, surveys, taxonomy, new records, Oribanidae 6346.
- India, Bihar**, new species, taxonomy, morphology, *Dactyloscirus patalipatrensis* 4765.
- pests, abundance, pest control, *Aceria litchii* 7698.
- India, Bisthenhatti**, abundance, species composition, habitat, Formicidae 5257.
- India, Darjeeling**, new species, taxonomy, morphology, *Drosophila dominici* 8795.
- surveys, Oribanidae 6349.
- India, Dharwad**, pests, crop fields, *Capsicum annuum*, *Melanotus* 5365.
- pests, species composition, activity patterns, soil, *Insecta* 5366.
- India, Goa**, epidemiology, infestation, synergism, man, *Pediculus humanus* 4517.
- India, Haryana**, colonial characteristics, mounds, architecture, *Odontotermes gurdaspurensis* 7801.
- India, Jabalpur**, pest outbreaks, population dynamics, environmental factors, *Helicoverpa armigera* 7769.
- India, Jodhpur**, pests, occurrence, new records, *Neomeskelia bergii*, *Pennisetum typhoidum* 1441.
- India, Kashmir**, new records, crops infestation, *Deudorix epijabas*, 3000.
- Prokramsalvia*, taxonomy, new species, morphology, infestation, roots, *Salvia moerocroftiana* 1641.
- soil fauna, forests, community composition, environmental factors, *Acari* 7009.
- India, Kerala**, new records, *Pentalostomus nobileae*, parasites, *Parotia vertumnalis* 2031.
- new species, new genera, taxonomy, morphology, *Indophanus dakshinus* 7159.
- parasitoids, pests, *Nephantis serinopa*, *Brachymeria nosatoi*, *Brachymeria nephantidis* 6761.
- pests, host plants, *Piper nigrum*, *Longitarsus nigripennis*, *Cydia hemidoxa*, *Liodorix kamii* 6946.
- India, Madhya Pradesh**, parasites, infestation, seasonal variations, *Diaretus rapae*, *Lipaphis erysimi* 6767.
- India, Maharashtra**, parasites, new records, eggs, *Scutellista cyanea*, *Parasaissetia nigra* 7540.
- pest outbreaks, pest control, *Scarabaeidae* 5362.
- India, Meghalaya**, new records, pest outbreaks, *Dysdercus clathratus* 7691.
- new records, pest outbreaks, *Stenachroa elongata*, *Zea mays* 7689.
- pest outbreaks, species composition, *Telegryllus muratus*, *Modicogryllus*, *Velarifictorus*, *Gryllopsis* 7694.
- India, Nagaland, Medziphema**, population density, burrowing behavior, seasonal variations, *Brachytripes scutellatus* 4447.
- India, Nilgiris**, new records, hosts, *Acacia decurrens*, parasites, *Xylebonus fornicatus* 2088.
- India, North**, parasites, new records, *Thelastomatidae*, *Arthropoda* 8390.
- India, Orissa**, new records, geographical distribution, soil, *Oribatei* 9487.
- India, Parbhani**, nuclear polyhedrosis virus, infection, *Anomis subulifera* 7391.
- India, Poona**, new records, geographical distribution, *Japys solifugus* 5521.
- India, Punjab**, host plants, new records, *Tetranychus neocaledonicus*, *Tagetes erecta* 6804.
- life history, host plants, pest control, *Holotrichia consanguinea* 5363.
- pest control, new records, pest outbreaks, *Psidium guajava*, *Metanastria recta* 7738.
- pest outbreaks, damage, crop fields, *odontotermes* 5370.
- pests, new records, infestation, *Citrus*, *Othresis fulvicornis*, *Othresis materna* 7790.
- pests, new records, seeds, *Zea mays*, *Caloglyphus krameri*, *Parasitus consanguineus*, *Procladius* 7735.
- Tetranychoides*, geographical distribution, new records 7912.
- India, Sabour**, pests, dispersion, seasonal variations, host plants, *Leucodermis orbonalis* 7741.
- India, Simla**, pests, development, fecundity, host plants, winter, *Myzus persicae* 7746.
- taxonomy, new species, morphology, *Cinara chaetotrostrata* 1642.
- India, Tamil Nadu**, occurrence, geographical distribution, *Argas robertsi*, *Omithodoros savignyi*, *Otobius megnini* 9216.
- India, Tripura**, pest outbreaks, crops, damage, *Oryza sativa*, *Dicladispa armigera* 7796.
- India, Uttar Pradesh**, taxonomy, pests, *Mangifera indica*, *Chlumetia transversa* 6121.
- India, Uttar Pradesh, Pithoragarh District**, check lists, species composition, 30 species, *Odonata* 8689.
- India, Varanasi**, crop fields, *Acari*, *Collembola*, soil fauna community structure, population density 4443.
- India, West Bengal**, abundance, community composition, soil properties effects on, *Oribanidae* 5250.
- abundance, community composition, soil properties effects on, *Collembola* 5253.
- association, human settlements, *Caliphoridae* 9210.
- community composition, soil, *Collembola* 5252.
- leaf-curl, *Eriophyidae* association, pest control, predators 9299.
- new genera, new species, *Dipterolynacis*, *Dipterolynacis* 8714.
- Rhynchophytus shoreana* 8714.
- new species, *Kobuzo multibrevicula*, taxonomy, morphology 1613.
- new species, parasites, *Tegolophus spondilalis*, *Tegolophus vitexis* 3969.
- new species, taxonomy, morphology, *Ventidius sushmiae* 7195.
- population density, activity patterns, seasonal variations, *Coleoptera* 5256.
- Indian Ocean, West**, islands, zoogeography, geographical distribution, origin, *Coccoidea* 4708.
- Indicator species**, brain hormones bioassays, *Philosamia ricini*, *Bombyx mori* 7330.
- oxygen depletion, freshwater environment, larvae, *Ephemeroptera* 3852.
- soil pollution, toxicity tests, *Collembola* 5047.
- toxicity tests, ecosystem dynamics, soil fauna, *Collembola*, *Coleoptera*, *Diptera* 5761.
- water quality, *Hydropsyche lobata*, Portugal, Vila do Conde 3053.
- Indicators**, damage, *Capsicum annuum*, age, *Ostrinia nubilalis* 8514.
- hosts taxonomy, parasites, *Myiobidae*, *Chiroptera* 5950.
- pest resistance, 6-methoxybenzoxazolinone, *Zea mays*, *Ostrinia nubilalis* 6099.
- phenotypes, economics, biochemistry, lipoproteins, *Isotoma tigrina* 4155.
- phenotypes, economics, biochemistry, lipoproteins, *Isotoma tigrina* 4155.
- Indigenous species**, occurrence, geographical distribution, *Psoocoptera*, Hawaii 7888.
- Indigenous species**, spacecraft, exhausts, effects on, *Insecta*, USA, Florida 6692.
- Indodindorhaphalus**, new genera, taxonomy, *Pseudorhaphalus* 7172.
- Indole-3-acetic acid**, effects on gonads, histology, development, *Dacus dorsalis* 8227.
- metabolism, gut, *Heteroptera* 3311.
- Indonesia**, new species, taxonomy, morphology, *Duculacarus turgesetosus* 2387.
- pests, crop fields, pest control, books, *Insecta* 5543.
- population dynamics, pest control, chemical control, *Brevipalpus phoenicis* 5388.
- Indonesia, Bengkulu**, Brugia malayi vectors, *Mansonia bonnae*, *Mansonia annulata*, *Mansonia uniformis*, *Mansonia dives* 6062.
- Indophasus**, new genera, taxonomy, *India*, Kerala 7159.
- Indophasus dakshinus**, new species, taxonomy, morphology, *India*, Kerala 7159.
- Induction**, diapause, photoperiods, predators, diets, *Carotenoids*, *Acari* 4257.
- enzymatic activity, hemolymph, α -trehalase, *Apis mellifera* 164.
- inhibition, heat shock proteins, *pscomavirus*, tissue culture, *Drosophila melanogaster* 982.
- mutation, eye color, *Apis mellifera* 1524.
- ovulation, mating effects on, neuroendocrine system, *Glossina morsitans* 388.
- polyribosomes, juvenile hormones, vitellogenesis, protein biosynthesis, *Locusta migratoria* 190.
- Industrial effluents**, pollution effects, parasitism, eggs, *Telenomus aradi*, *Aradus cinnamomeus*, Finland 5934.
- Industries**, wildlife conservation, *Lepidoptera*, Taiwan 2113.
- Infants**, infestation, case reports, *Cordylobia anthropophaga*, Kenya 4515.
- sepsis, case reports, infestation, *Drosophila* 4500.
- Infectious bursitis virus**, identification, *Aedes vexans* 1828.
- Infections diseases**, Norwegian scabies, development, man, *Acari* 3659.
- Infectivity**, barley yellow leaf virus, *Rhopalosiphum padi*, *Rhopalosiphum maidis*, *Macrosiphum muscandini* avenae, seasonal variations, Australia, Victoria 2618.
- cuteicle lesions, histopathology, *Glossina morsitans morsitans* 8162.
- demonstrations virus storage effects on, larvae, *Aedes aegypti* 8992.
- disease transmission, *Glossina morsitans*, *Trypanosoma congolense* 1340.
- X disease transmission, *Macrosteles fascifrons* 4191.
- feeding behavior effects on, disease transmission, pumpkin mosaic virus, *Aphis craccivora* 3703.
- Laspeyresia pomonella granulovirus* virus, pest control, *Rhyacionia frustrana* 9332.
- myk disease pathogens, *Scarabaeidae*, *Apodius tasmanica* 624.
- nuclear polyhedrosis virus DNA, *Trieboplusia m.*, biological control 1034.
- parasites, *Gastromermis*, *Aedes aegypti*, *Culex pipiens fatigans*, *Anopheles stephensi* 5740.
- parasites, genetic factors, *Trypanosoma brucei*, *Glossina morsitans* 4185.
- parasites, salinity effects, *Nematoda*, *Culicidae* 266.
- pathogens, *Microsporida*, *Aedes aegypti* 8127.
- pathogens, temperature effects, *Culicimomyces*, *Anopheles hilli* 1039.
- pathogens, *Theileriella annulata*, *Hyalomma excavatum* 6607.
- temperature effects on, *Anaplasma marginale*, *Dermacentor andersoni* 8137.
- virus-like particles transmission, feeding, *Glossina pallidipes* 8140.
- Inflammation**, parasitism, *Bos taurus*, *Boophilus microplus* 2912.
- Information centers**, entomology, pest control, diagnosis, USA, Minnesota 3961.
- terrestrial ecosystems, surveys, *Insecta*, British Isles 2120.
- Information systems**, systematics, computers, *Arthropoda* 4759.
- Information theory**, trophallaxis, communication, antennae, *Myrmica rubra* 5870.
- Ingestion**, electronic equipment, measurements, *Nephrotettix cincticeps* 1699.
- pathogens, pathogenicity, *Metarhizium anisopliae*, *Beauveria bassiana*, *Gliocladium virens*, *Reticulitermes* 8150.
- potassium iodide, effects on growth, egg production, *Bombyx mori* 6649.
- Inheritance**, coloration, genetic factors, *Myzus persicae* 5478.
- esterase, *Anthonomus grandis grandis* 8661.
- genetic factors, antennal sensilla, *Apis mellifera* 7060.
- genetics, genes, breeding success, host plants, *Pisum sativum*, *Sitophilus oryzae* 1489.
- infection susceptibility, parasites, *Brugia pahangi*, *Wuchereria bancrofti*, *Aedes* 8146.
- morphology, population genetics, *Cyclophora albipunctata subrosea*, British Isles 4690.
- mutation, pigmentation, eye, *Oryzaephilus mercator* 5470.
- pest resistance, genetic factors, *Penutisus americanus*, *Blissus leucopertus leucopertus* 8460.
- pest resistance, *Nalaparvata lugens*, *Oryza sativa* 5404.
- pesticide resistance, aryl carbamate insecticides, *Metaseiulus occidentalis* 8651.
- pesticide resistance, *Malathion*, *Anopheles stephensi* 304.
- phenotypes, population genetics, *nigrescens*, *Pachymenia hippocastanaria* 6285.

Inheritance, (continued)

sex linkage, reproductive behavior, oviposition, *Callosobruchus maculatus* 5483
sulfur resistance, population genetics, *Metasulcus occidentalis* 5493
susceptibility, *Glossina morsitans*, *Trypanosoma congolense* infection 8158

Inhibition,

aggregation pheromone, ipenol, verbenone effects on, *Ips typographus* 7336
control, sex pheromone mutants, *Drosophila melanogaster* 972
DNA biosynthesis, diflubenzuron, pupae, *Stomoxys calcitrans* 1043
emergence, eggs, insecticides benzoylphenyl urea, toxicology, biological control, *Tribolium castaneum* 3451
food consumption, brain centers, *Labidura riparia* 479
growth, larvae, insecticides, *Spodoptera frugiperda* 3445
host searching behavior, vitellogenin effects on, *Aedes aegypti* 2807
hydroxy-methylglutaryl-CoA reductase, *Drosophila melanogaster*, juvenile hormones, compactin, *Manduca sexta* 6558
induction, heat shock proteins, picornavirus, tissue culture, *Drosophila melanogaster* 982
juvenile hormones synthesis, precocenes effects on, *Ageratum houstonianum* 3342
maturation, oogenesis, pheromones effects on, *Solenopsis invicta* 390
mitochondria, ovary, diterpenoids, *Rabdosia*, *Macrotermes subhyalinus* 2556
mitosis, wing discs, γ -radiation effects on, *Drosophila melanogaster* 1106
ovary growth, ethionine, *Agrina bousei* 3319
sex pheromone chemical communication, (Z)-9-alkenols effects on, *Spodoptera litura* 1163
sexual reproduction, pest control, insecticides, penfluron, diflubenzuron, *Poecilobius pictus* 4619
thallophilic potassium active transport, mudgut, *Hydophora ecetopia* 8074
vitellogenesis, makisterone A effects on, *Oncopeltus fasciatus* 348

Inhibitors,

effects on ATP pyrophosphatase activity, malpighian tubules, *Locusta migratoria* 2572

effects on respiration, enzymatic activity, electron transport, mitochondria, *Musca domestica* 953

ion transport, effects on diuretics, *Glossina morsitans* 4994

molt, azadirachtin, pest control, *Lepidoptera* 9333

molt, host plants, *Lepidoptera*, *Ajuga reptans* 4274

pheromones, pest control, *Dendroctonus frontalis*, *Ips avulsus* 3788

protease, hemolymph, metamorphosis, *Bombix mori* 7478

sex pheromone, pest control, methodology, females, *Diparopsis castanea* 1465

Injection,

acaricides, ivermectin, efficacy, cattle, *Amblyomma americanum* 4506

nuclei, eggs, micromethods, *Drosophila* 8850

Injury,

abdomen, electrophysiological recording, *Locusta* 8915

Island water environment,

salt marshes, abundance, ecological distribution, *Culicidae*, USA, Virginia 8610

Inner Herbivores Ia,

geographical distribution, occurrence, *Microlepidoptera* 6315

Inservation,

antennal sensilla, larvae, *Simuliidae* 4135

chemoreceptors, sensilla, *Aedes aegypti* 3290

flight muscles, development, *Manduca sexta* 8910

sensilla, mechanoreceptors, mouthparts, females, *Simulium venustum* 4142

Inoculation,

methodology, microfilariae, *Setaria labiata* 7259

Inoculation,

symbionts, colonial characteristics, *Termitomyces*, *Macrotermite* 2809

Inokosterone,

effects on reproduction, development, *Glossina morsitans* 355

Inopos rubriceps,

biological control, agricultural practices, grazing defoliation, Australia 729

Inorganic compounds,

carriers, insecticides, efficacy, *Athenogona soccata* 7795

Inorganic pyrophosphatase,

purification, activity, embryos, *Hyalomma dromedarii* 3316

Insects,

abundance, community composition, shade effects on, New Zealand, Waitakere R 6229

abundance, crop fields, *Trifolium alexandrinum*, Egypt 6876

abundance, crop fields, weed control effect on, *Glycine* max 2997

abundance, drift, pollution effects, insecticides, streams 7820

abundance, environmental impact, power plants, flushing, USA, Nebraska, Niobrara R 8611

abundance, species composition, host plants, *Trifolium alexandrinum*, Egypt 6811

abundance, species composition, soil fauna, agricultural ecosystems, Egypt 7011

activity patterns, measuring techniques, instruments 1685

adaptations, cold tolerance, survival, polar environments, Canada 980

adaptation, host specificity, pest control, *Glycine* max 707

adaptions, allogenic evolution 775

adenylate cyclase, biochemical characteristics, identification, reviews 5682

agricultural practices, medical importance, identification, taxonomy, Africa 3782

air pollution, pollution effects, population studies, reviews 6689

allergic diseases, man 1374

altruism, kin selection, social organization 7028

amino acids, aromatic compounds, metabolism, cuticles 171

antifeedants, purification, ipolamide, *Stachytarpheta mutabilis* 8967

aquatic animals, water temperature, evolution ecology, reviews 6235

aquatic organisms, hosts, pathogens asexual reproduction, *Entomophthora conica*, *Entomophthora rhizospora* 1809

aquatic organisms, parasites, commensals, *Acarina*, *Protozoa* 7022

aquatic organisms, physiology, morphology, flight activity, adults, juveniles 1486

aquatic organisms, toxicity, nicotine 9371

association, abundance, host plants, *Kochia prostrata* 4392

association, ecological distribution, fungi 6038

association, host plants, *Convolvulus* species, Canada, Ontario 6794

association, *Picea abies* cones, species composition, Poland 9201

benthos, streams, species composition, predators population decline effects on, *Salvelinus fontinalis* 8613

biochemistry, cold tolerance, adaptations 956

biochemistry, hydrocarbons, chemical ecology, reviews 5655

biogeography, streams, rivers, Australia, New Zealand 3952

biological control, granulosis virus 3426

biological control, male sterility, population dynamics, mathematical models 2943

Insecta, (continued)

biological control, nuclear polyhedrosis virus, granulosis virus, safety regulations 1308

biological control, nuclear polyhedrosis virus, virulence, rearing 3828

biological control, pathogenicity, *Bacillus thuringiensis*, *Bacillus sphaericus* 8120

biological control, pathogens, *Bacillus thuringiensis* 2218

biological control, pathogens, fungi 1471

biological control, pathogens, *Verticillium lecanii* 2217

biological control, replication, nuclear polyhedrosis virus, granulosis virus 3394

biology, taxonomy, conferences 5542

catching methods, emergence traps, larvae 6467

cell culture, media (culture), TC-199-MK 5618

cell lines, growth, media (culture), TC-199-MK 8852

cells differentiation control, books 8711

cellulose digestion, enzymes 4156

central nervous system, neurons, biochemical analysis, neurotransmitters 3284

centrifugation, isolation, enzymes, oxidases, mucrosomes 5623

check lists, ecology, geographical distribution, British Isles 3137

check lists, herbivores, Manihot esculenta 4528

chemical communication, pheromones, cadang-cadang, Philippines 3804

chemical communication, pheromones 4310

chemical control, insecticides, *Gossypium*, Nigeria 5399

chemical control, *Isaria felina* isarins, insecticides, activity 2224

chemical control, pest control, *Albemelosus esculentus* 7706

chemical control, pest control, *Pinus strobus*, USA, North Carolina 2982

chemical control, pesticide resistance 9437

chromosomes, role, taxonomy, classification 3976

classification, systematics, methodology 3169

cold tolerance adaptations, alpine environments, Canada 8103

cold tolerance, freezing, adaptations, Antarctica 2730

collections, taxonomy, identification, Kenya 3175

colonial characteristics, social behavior, genetic relationship, measuring techniques 7871

colonization, drilled holes, trees, species composition 2284

community composition, abundance, crop fields, *Leguminosae* 6901

community composition, association analysis, plants, *Xanthocephalus sarthrae*, *Xanthocephalus microcephala* 2064

community composition, crop fields, vegetation patterns effects on, *Trichogramma*, parasites, abundance, crop fields, *Heliothis zea* 2888

community composition, nutrient content, forests, canopies, USA, North Carolina 2144

community composition, paleoenvironments, paleoclimatology, Norway 4750

community composition, pollution effects, tephophs, streams 7021

community composition, salt marshes, herbivores, nutrient enrichment, Spartina 2390

community composition, succession, association, *Heliconia* 5951

community structure, pollution effects, sewage effluents, streams, USA, Virginia 7814

competitive behavior, social behavior, conferences 1583

competitiveness, male sterility, statistical Analysis, variance 2480

containers, design, transport, shipment, samplers 1689

control programs, chemosterilants 4575

counters, acoustics, design, traps, sex pheromone 54

crop fields, catching methods, samplers, traps, aquatic animals 5624

crops, pest resistance breeding 4531

cross-reactivity, antibodies, NADPH-cytochrome reductase, *Spodoptera eridania* 1768

cultivation, mass rearing, technical entomology 7258

culture systems, chambers 3249

cytoplasmic polyhedrosis virus infection, pathogenesis, larvae 7363

damage effects on water loss, leaves, *Glycine* max 6939

damage, host plants, *Metrosideros collina* polymorpha, USA, Hawaii 5202

defoliation, effects on survival, *Pinus kesiya*, *Pinus oocarpa* 3596

developmental stages, duration, mathematical models, algorithms 5628

diapause, neuroendocrine system, environmental conditions 3478

diapause, physiology, metabolism, hormones, conferences 3959

disease resistance, pathogens, microorganisms 7370

disease transmission, pathogens, *Erwinia carotovora* 8493

diseases, pathogenesis, books 7920

dormancy, ecological evaluation, population ecology, reviews 7580

ecdysone metabolism, reviews 6574

ecdysteroids, metabolism, regulation 3344

ecophysiology, developmental stages, deserts, temperature effects on oxygen consumption 5710

embryogenesis, oogenesis, maternal effects, biochemistry, reviews 5837

endangered species, rare species, British Isles 2118

entomopoxvirus infection, pathogenesis 7364

environmental effects, neuroendocrine system 3338

environmental stress, water flow, distribution, dispersion, rheotaxis, fresh waters, Germany, Fed. Rep., *Schierenseebios* 561

environmental surveys, community composition, USA, Arizona, Sycamore Creek 3870

environmental surveys, wetlands, aquatic animals, Canada 3930

escape behavior, webs, *Araneae* 6732

evolution, natural selection, predation, sexual reproduction, males 4698

excretion, renal function, fluids transport, Malpighian tubules, reviews 8931

eye pigments, isolation methodology 2482

fat body, goig apparatus, phosphorus localization, spectroscopy (photoelectron) 8937

feeding apparatus, design, blood sucking 1700

feeding behavior, association, *Euphorbia maculata*, USA, Pennsylvania, USA, North Carolina 2855

feeding behavior, filter feeders 477

feeding damage, host plants, regeneration, *Nymphoides cristatus* 6801

flight activity, olfactory stimuli, orientation, chemoreception, atmospheric conditions 5130

flight, locomotion 3274

flight muscle activation, neurophysiology 1733

flight, traps, design 1687

floods, recolonization, USA, Arizona, Sycamore Creek 5432

flowers pollination, feeding behavior, morphology 2847

food organisms, *Cyprinidae* 620

food organisms, predation, lakes, *Polycelis nigra* 1487

fossils, Oligocene epoch, USA, Colorado 3168

Subject Index

Insecta, (continued)

- fossils, paleoecology, USA, Minnesota 791
- freshwater environments, colonization, flight activity, dispersal 6230
- fruit rot, *Artocarpus heterophyllus*, *Rhusopis artocarpus* 2232
- fruit trees, pest control, pesticide applications, methodology 1423
- functional morphology, leg 2520
- galls effects on meiosis, polyphloids, *Persoonia falcata* 8343
- galls formation, host plants, Sweden 7558
- galls, host plants, collections, Sweden 3599
- growth, ectopic neurons, sensors, central nervous system, reviews 3471
- growth regulators, synthesis 8940
- hemolymph, lipids + proteins, terminology, lipophorins 94
- herbivores, community composition, leaf litter 9187
- herbivores competition, community structure comparison, reviews 593
- herbivores, ecological distribution, host plants, reviews, *Xanthium spinosum*, *Xanthium strumarum*, World 8357
- herbivores, effects on abundance, recruitment, *Haplophragma squarrosus*, USA, California 6783
- herbivores, feeding behavior, antifeedants, biological properties 8294
- herbivores, host plants, chemical composition, tannins, reviews 6010
- herbivory, coevolution, host plants trees, British Isles 2846
- herbivory, *Eucalyptus blakei*, Australia 2045
- hormones, amino acid sequence 969
- horticulture, environment management, pest control, weed control 3958
- host plants, host preferences, host selection, sensory stimuli, herbivores 8070
- host preferences, host plants, reviews, *Helianthus annuus* 4390
- hosts, biological control, pathology, parasites effects on, *Mermithidae* 3749
- hosts, *Nematoda* parasites 3956
- hosts, parasites, biological control, *Nematoda* 3614
- hosts, physiology, parasites effects on, *Mermithidae* 3404
- hydrolysis phosphatidylinositol, calcium channels, salivary gland 4950
- identification, collections 3960
- identification, taxonomy, Africa 3179
- identification, taxonomy, collections, status, Malawi 3174
- identification, taxonomy, status, Africa 3178
- identification, taxonomy, status, economics, Africa 3176
- identification, USA, South Dakota 294
- immune response, self-assessment, role hemocytes 6604
- infection, histopathology, *Bacillus thuringiensis* 7375
- infection, pathogenesis, fungi 7368
- infestation, food quality determination, methodology 3735
- insecticides, pest control, New Caledonia 4558
- insecticides, pyrethroids, toxicity, selectivity, natural enemies, pests 7408
- insecticides, toxicity 1067
- insecticides, toxicology, mode of action, reviews 5802
- juvenile hormones, developmental stages, measuring techniques, radioimmunoassay 2587
- larvae, baculovirus, cytoplasmic polyhedrosis virus, infection, association, biological control 8449
- larvae, cell culture, nuclear polyhedrosis virus, proteins, enzyme-linked immunosorbent assay 1091
- larvae, toxicant, accephate, methamidophos 315
- leaf miners, fossils, miocene, host plants, *Mahonia reticulata* 4751
- leafminers, guilds, population-environment relations, population density, species diversity 3632
- lecithins, occurrence, reviews 180
- leg regeneration, cells interaction 4251
- meiosis 8242
- meiosis, evolution 8668
- metabolism, phosphorylase 3321
- metabolism, immunoadsorption, purification, ecdysteroids 58
- methodology, photography 5631
- microorganisms, use, pathogens 8532
- microtubules stability, dissection methodology 106
- migrations, synchronization, seasons, diapause 8359
- milky disease, pathogenesis 7373
- molding, metamorphosis, physiology effects on 3517
- morphology, neurophysiology, neurosecretion, neurons, literature reviews 900
- mortality, fumigation, phosphane, *Phoenix dactylifera* 8355
- mortality, herbivores, host plants, leaves, abscission 5340
- mutagenesis, effects on RNA biosynthesis, endotoxins, *Bacillus thuringiensis* 7369
- neurotransmitters, effects on mammalian central nervous system 200
- night activity, equipment, cameras 3247
- night flight activity, aggregation, convergence zones, atmospheric conditions 1573
- nutrition ecology, physiology, behavior, environmental changes 4464
- nutrition, food conversion, bibliographies 4757
- occurrence, Greece, Rhodes, Crete 9471
- occurrence, new records, Eure 9454
- octopamine, neurophysiology, neurotransmitters, hormones, modulators, reviews 4127
- oviposition, site selection, host plants, *Lycopersicon esculentum* 2081
- paleoecology, swamps, Upper Carboniferous, USA, Pennsylvania 2376
- parasites, asexual reproduction, adaptations, aquatic environment, *Entomophthora conica*, *Entomophthora rhizospora* 1009
- parasites, autecology, books 8708
- parasites, life history, *Retractrocephalus* 7383
- parasites, man, identification methodology 8423
- parasites, new records, species composition, Chrotopera, USA, Michigan 7550
- parasitism, drought effects on, *Coniferales*, USA, California 4394
- parasitoids, population density effects on host-parasite interactions 3575
- pathogens, electron microscopy (scanning), ultrastructure, baculovirus, cytoplasmic polyhedrosis virus, *entomovirus* 8143
- pathogens, host specificity, tropical environment, forests, *Cordyceps* 3649
- pathogens, identification, electrophoresis, *Trypanosomatidae* 5032
- pathogens, new records, *Entomophthora*, Finland 5721
- pathology, bacteria diseases 7366
- pest control, agricultural ecosystems, ecosystem analysis, reviews 6208
- pest control, agricultural practices, yield, *Zea mays*, *Vigna unguiculata* 8520
- pest control, biological control, granulosis virus, reviews 4505
- pest control, biological control, *Nematoda* 7664
- pest control, biological control, *Nematoda* 7667
- pest control, biological control, parasitoids, reviews 7665
- pest control, biological control, pathogens, population dynamics, mathematical models 8452

Insecta, (continued)

- pest control, biological control, predators, *Megaderma lyra lyra*, India 5214
- pest control, biological control, reviews, fungi 8509
- pest control, biological control, reviews, *Nematoda* 7666
- pest control, chemical control, crop protection 3709
- pest control, chemical control, fenvalerate 5326
- pest control, control programs, forests, China 2216
- pest control, crop fields, agricultural practices, and zones, India 5401
- pest control, crop fields defoliation, simulation, *Solanum tuberosum* 3814
- pest control, crop production, *Medicago sativa* 3015
- pest control, crop protection, confusers 3954
- pest control, crop protection, environmental protection, population levels monitoring 3714
- pest control, crop protection, pesticide applications, environmental protection 3715
- pest control, effects on crop yield, *Cucurbita pepo* 4567
- pest control, environment management, developing countries, conferences 3957
- pest control, environment management, horticulture 3726
- pest control, environment management, research programs, planning 3809
- pest control, environment management, role, pheromones 3797
- pest control, environment management, USA, California 3725
- pest control, environment management, USA, South Dakota 3758
- pest control, feeding behavior, *Tadaria aegyptiaca thomasi*, India 5221
- pest control, forest management, viruses 1386
- pest control, forestry, resource management 9351
- pest control, fruit trees, pesticide applications, freezing stress 1427
- pest control, growth regulators, interference, endocrine system, juvenile hormones 8447
- pest control, horticulture, urban environments, environment management 3727
- pest control, insecticides, roots, *Capsicum annuum* 7695
- pest control, integrated control, crop protection, environmental protection 3712
- pest control, integrated control, economics 3711
- pest control, integrated control, *Gossypium* 9319
- pest control, juvenile hormones, endocrinology, precocenes, metamorphosis, mortality 8442
- pest control, microwave radiation, fumigation, botany specimens 2198
- pest control, modeling, computer programs 3016
- pest control, moulting inhibition 9287
- pest control, pathogens, baculovirus 7371
- pest control, pesticide applications, crop fields 8551
- pest control, pesticide resistance, crop protection 3713
- pest control, pesticide resistance, orchards, reviews, *Malus* 7727
- pest control, pheromone traps, fruit trees 2992
- pest control, pheromones 3710
- pest control, population regulation, *Pinus*, Turkey 619
- pest control, rangelands, ecosystem analysis, reviews 6212
- pest control, resource management, forestry, research programs 5323
- pest control, stored products 2984
- pest control, stored products, carbon dioxide 1403
- pest control, stored products, grain, Malawi 6968
- pest control, stored products, insecticides 2190
- pest control, weed control effects on, horticulture, environment management 3728
- pest resistance, biochemistry, *Sorghum bicolor* 4564
- pest resistance, cultivars, *Glycine max* 6942
- pest resistance, vegetables, crop protection 3017
- pesticide resistance, evolution, population genetics, models 6289
- pesticide resistance, population genetics, 4824
- pesticide resistance, toxicology, chemical control, pests 3817
- pests, abundance, crop fields, agricultural practices effects on 3035
- pests, abundance, pest control, *Persa* fruits 1454
- pests, check lists, *Manihot esculenta*, India 4620
- pests, chemical control, crop fields, pesticide applications, electrostatic sprayer 8486
- pests, chemoreception, volatiles, host plants, pollution effects, sulfur dioxide 5132
- pests, crop fields, *Cajanus cajan* 4553
- pests, crop fields, pest control, books, Indonesia 5543
- pests, environmental management, control programs, USA, Arizona 1434
- pests, forest management, protection, Germany, Fed. Rep. 1392
- pests, infestation, vertical distribution, crops, *Brassica*, India, Meghalaya 7687
- pests, integrated control, ecological evaluation, orchards, *Malus* 7730
- pests, integrated control, reviews, *Solanum tuberosum* 6209
- pests, landing behavior, *Pinus radiata* host plants, USA, California 3739
- pests, pathogenicity, *Pachymyces farinosus* 1001
- pests, population dynamics, natural enemies, conferences 8672
- pests, silviculture, damage, defoliation, *Populus* 5349
- pests, soil, species composition, India, *Dhatura* 5363
- pests, species composition, *Manihot esculenta* crop fields, USA, Florida 4555
- pests, stored products, surveys, Saudi Arabia 3738
- pests, succession, population growth, *Oryza sativa*, India 7783
- pheromones, synthesis, chemical composition, pest control, conferences 9503
- photography, methodology, equipment 7249
- photoecology, circadian rhythms, photoperiod, reviews 8922
- phylogeny, paleontology, reviews 3134
- phylogeny, taxonomy, evolution, homoplasy 5505
- physiology, endocrinology, neurophysiology 3955
- phytophagous, ecophysiology, nutrient cycles, forests 7593
- pitfall traps, efficiency, barriers, methodology 4085
- pollination, competition, *Centaurea scabiosa*, *Centaurea nigra* 7552
- pollination, flowering, *Nymphaea elegans*, USA, Texas 5209
- pollination, flowering phenology, *Linaria vulgaris* 5203
- pollination, host plants attractancy, *Helianthus annuus* 7762
- pollination, host plants reproductive strategy, population genetics 3592
- pollination, species diversity, flowering, evolution, *Angiospermae* 5200
- pollinators competition, nectar production, *Centaurea scabiosa*, *Centaurea nigra* 6803
- pollinators, effects on cross-breeding, *Cajanus cajan* 1235
- pollinators, foraging behavior, *Brassica oleracea capitata*, 5297
- pollution effects, diflubenzuron, community composition, streams 7024
- pollution effects, rivers 5437
- polymorphism, metamorphosis, development, juvenile hormones role 6573
- population density estimation, environmental impact, statistical analysis 4755
- population dynamics, feeding, host plants 9165
- population dynamics models, role, pest control, behavior 4435
- population dynamics, mortality, killing power, mathematical models 3638
- population dynamics, self-regulation, environmental factors, mathematical models,

Insecta, (continued)

- Chitty Hypothesis 9184.
population dynamics, spatial distribution, time variation, mathematical models 5239.
predation, natural enemies, sex ratio, population dynamics 8386.
predation, searching efficiency, population studies, predator-prey interactions, mathematical models 8388.
predators, effects on pests abundance, crop fields, *Brevicoryna brassicae* 6908.
predators, pest control efficiency, *Nezara viridula* 607.
predators, sampling methodology, crop fields, *Glycine max* 6145.
preservation, methodology 4073.
preservation methodology 8865.
prey, activity patterns, *Parulidae* predators 4421.
protein biosynthesis, enzymatic activity, juvenile hormones effects on 3331.
rearing, light, methodology 3241.
resting behavior, webs, silk 5905.
RNA viruses, characterization, biological control 8147.
samplers, instruments, design 1497.
segmentation, cytology, reviews 8897.
sex pheromone, chemical composition effects on persistence 216.
spacecraft, exhausts, effects on, USA, Florida 6692.
species composition, association, *Zygophyllum simplex*, Namibia, Namib Desert 9160.
species composition, host plants, *Convolvulus arvensis*, Egypt 6807.
spermatogenesis, endocrine function 3508.
Syrphimela citri detection, enzyme-linked immunosorbent assay, 6597.
terrors, biochemical analysis, pest resistance, susceptibility, *Glycine max* 535.
stings, anaphylaxis, immunotherapy, man 7635.
stored products containers, pest resistance 9337.
stored products pest control, juvenile hormones analogs effects on development 2255.
stored products pest control, microwave radiation 3784.
stored products pest control, pirimiphos methyl, efficacy 676.
stored products pests detection, traps 1783.
stored products pests, phosphine toxicity 1051.
stored products pests, phosphine toxicity, atmospheric conditions effect on 1050.
stored products pests, repellents, comparative studies 711.
stored products pests, toxicity, DDT, lindane 7409.
stored products, ships, pest control, phosphine fumigation 2241.
succession, community composition, fires, recovery, chapparal, USA, California 5246.
surveys, abundance, weeds, Egypt 6957.
surveys, pests, forestry, agriculture, horticulture, Denmark 5308.
surveys, species composition, distribution, India 7908.
taxonomy, identification, status, Egypt, Arab Rep. 3177.
terrestrial ecosystems, surveys, information centers, British Isles 2120.
toxicity, endotoxins, *Bacillus thuringiensis* 7365.
toxicity, methyl parathion, toxaphene 1830.
toxicity testing, avermectins 4214.
toxicity testing, pollution effects, diflubenzuron, streams, community composition 9370.
toxins, venom, biochemistry, reviews 5804.
transmission, geographical distribution, *Bacillariophyceae* 564.
traps, adhesives, efficacy 50.
traps, efficacy, association, *Pinus* 8021.
trees, species composition, sampling methodology 6842.
tree borne diseases, viruses, epidemiology, *Oryza sativa* 9275.
vectors, medical importance, role, enzyme-linked immunoassay 4092.
vectors, salmonellosis, urban environment, man 6885.
venom, sensitivity, man, immunotherapy, case reports 3686.
viruses replication, reviews 8990.
vision, compound eyes, migrations, pigments, light intensity 4139.
weed control, biological control, methodology 1432.
weed conservation, institutions, British Isles, England 2125.
- Insecticides**
acaricides, malathion, diazinon, ethyl parathion, fenthion, efficacy, *Tetranychus telarius* 7794.
acephate, acute toxicity, *Phytoseiulus persimilis*, *Tetranychus urticae* 309.
aerial applications, foliar applications, chemigation, pest control, crop protection 4581.
acrolein, permethrin, pyrethrin, resmethrin, malathion, chemical control, *Anopheles quadrimaculatus*, *Culex quinquefasciatus* 6093.
allitin, pest control, *Gossypium* crop fields, *Pectinophora gossypiella*, *Earias*, *Heliothis armigera*, India 7701.
Ambro bait, pest control, efficacy, *Solenopsis invicta* 9311.
analogues, toxicity, *Musca domestica* vicina, *Culex pipiens pallens* 4230.
aryl carbamates, pesticide resistance, inheritance, genetic factors, *Metaseiulus occidentalis* 8651.
aryl carbamates, pesticide resistance, genetics, biochemical characteristics, *Metaseiulus occidentalis* 4688.
Bacillus thuringiensis, cultivars, *Trichoplusia ni*, *Pieris rapae*, *Plutella xylostella*, cultivars, *Brassica oleracea* 1834.
bait, toxicity, boric acid, isodofenphos gel, *Blattella germanica* 5776.
Bay Vi 7505, systemic, livestock, *Musca autumnalis*, *Musca domestica* 9326.
benzoylphenyl urea, inhibition, emergence, eggs, toxicology, biological control, *Tribolium castaneum* 3451.
bioassays, pesticide applications, *Choristoneura occidentalis* 4615.
bioassays, field trials, electronic equipment, incubation, *Lygus hesperus*, *Acyrtosiphon pisum* 8015.
butonate, trichlorfon, photoperiod, effects on sensitivity, *Musca domestica* 7419.
cannibals, synergism, isodilipropyl alcohol, toxicity, *Tribolium castaneum* 7416.
carbofuran, diazinon, quinalphos, efficacy, *Orseolia coryzae*, *Scirpophaga inercutalis* 7771.
carbofuran, effects on females fecundity, *Unapis euonymi* 2651.
carbofuran, persistence, soil, crop fields 8521.
carbofuran, pest control, *Atherigona soccata* 5358.
carbofuran, toxicity, pest control, nymphs, *Nilaparvata lugens* 1847.
carriers, inorganic compounds, efficacy, *Atherigona soccata* 7795.
carriers, toxicity, nontarget organisms, *Chrysopa carnea*, *Hippodamia convergens*, *Aphytis melinus* 5785.
cattle, ear tags, cattle, *Musca autumnalis*, *Haematobia irritans* 6131.
cattle pest control, efficacy, *Hypoderma lineatum* 2172.
chemical control, *Aedes aegypti* 2919.
chemical control, *Anticarsia gemmatilis*, *Cesotoma trifurcata* 2236.
chemical control, blueberry sheathing virus vectors, Illinois peppers 8458.
chemical control, carbaryl, fenitrothion, fenthion, monocrotophos, efficacy,

Insecticides, (continued)

- Holotrichia consanguinea* 7792.
chemical control, coconut pests, *Nephantis serinopa* 1396.
chemical control, comparison, methodology, *Chilo partellus* 7759.
chemical control, crop fields, *Carabidae* 1394.
chemical control, dicotrophos, benomyl, trees, trunk injection, *Carya illinoensis*, *Monilophis nigropunctata*, *Monella caryella*, *Tinocallis caryae* 8566.
chemical control, efficacy, *Agrotis orthogona* 6088.
chemical control, *Gascardia destructor* 2938.
chemical control, *Keiferia lycopersicella* 3755.
chemical control, malathion, *Ceratitis capitata*, USA, California 713.
chemical control, *Amsacta moorei* 7685.
chemical control, pest control, *Cosmopolites sordidus* 5377.
chemical control, pest control, crop fields, *Amsacta devastans* 4552.
chemical control, pest control, larvae, *Malacosoma indica*, India 1449.
chemical control, pests, *Minidarus abietinus*, USA, North Carolina 4336.
chemical control, pests, seed treatments, *Triticum*, *Microtermes obesi*, India 5398.
chemical control, pests, *Siphonaptera* 7637.
chemical control, population growth, *Nilaparvata lugens* 6162.
chemical control, predators, *Coccinellidae*, *Leis axyridis*, *Propylaea japonica* 1417.
chemical control, *Psila rosae* 720.
chemical control, stored products pests 5354.
chlordaneform, metabolism, larval diapause, *Diatraea grandiosella* 3333.
chlordaneform, toxicity, nontarget organisms, *Geocoris*, *Hippodamia convergens*, *Nabis*, *Chrysopa carnea* 4227.
chlorfenvinphos, carboufuran, isofenphos, terbufos, effects on, parasites, *Hylemya brassicae*, *Bembidion lampros*, *Aleochara bilineata*, susceptibility, tolerance, *Brassica oleracea* botrytis 717.
chlorpyrifos, pesticide resistance, *Blissus asulatus* 8191.
control programs, disease transmission, effects on nontarget organisms, wildlife management, *Glossina* 1346.
control programs, disease transmission, trypanosomiasis, *Glossina*, Congo, People's Rep. 9244.
coumaphos, pesticide applications, dipping, cattle 8433.
cycasethrin, chemical control, *Heliothis armigera*, *Diparopsis castanea*, *Earias* 5389.
DDT, effects on body size, fecundity, survival, *Culex quinquefasciatus* 5770.
DDT, susceptibility selection, males release, *Anopheles gambiae* 6135.
dameethrin, pest control, traps, *Glossina tchadensis*, *Glossina palpalis gambiensi*, Ivory Coast, Leraba R. 4550.
decamethrin, chemical control, *Aedes fluviatilis*, *Culex pipiens fatigans* 5350.
decamethrin, chemical control, pests, *Stilpnotus zeamais*, *Sitotroga cerealella* 6192.
decamethrin, methyl parathion, diazinon, effects on, pest outbreaks, *Nilaparvata lugens* 307.
decamethrin, traps, pest control, *Glossina fuscipes quanzensis*, *Glossina palpalis palpalis*, Congo, People's Rep. 4547.
decomposition, *Acacia* fungi 2133.
degradation, ashes effects on, chemical control, *Laspeyresia pomonella*, USA, Washington 3785.
demeton, endosulfan, methomyl, oxamyl, azinphosmethyl, carbaryl, toxicity, *Phyllonorycter blancardella*, *Apanetes ormis* 8200.
dichlorvos, chemical control, methodology, pests, *Megaselia halterata* 1461.
dieldrin, metabolism, microorganisms, cuticle, *Calliphora erythrocephala* 5799.
diflubenzuron, bioaccumulation, localization, tissues, histochemistry, *Pieris brassicae* 1059.
diflubenzuron, depuration, elimination, feces, *Pseudoplusia includens* 299.
diflubenzuron, efficacy, chemical control, *Anthrenus grandis grandis* 4584.
diflubenzuron, factors affecting, toxicity, *Laspeyresia pomonella* 4225.
diflubenzuron, metabolism, sesoxane, *Musca domestica* 5773.
diflubenzuron, metabolism, *Tetranychus urticae* 1390.
diflubenzuron, penfluron, toxicity, chitin biosynthesis, *Chrotogonus trachypterus* 6620.
diflubenzuron, pest control, *Muscidæ* 5345.
diflubenzuron, pollution effects, streams, *Insecta* 7024.
diflubenzuron, toxicity, *Hypera postica* 7420.
disease control, vectors, blueberry sheathing virus, Illinois peppers 4630.
dose-response effects, enzyme polymorphism, larvae, *Choristoneura occidentalis* 4229.
dusts, BHC, carbaryl, endosulfan, DDT, malathion, efficacy, *Amsacta biguttula biguttula* 7749.
economics, integrated control, crop protection, *Oryza sativa*, Philippines 5391.
effects on community composition, crop fields, *Araneae*, *Ophioides*, Sweden 4459.
effects on community composition, non-target organisms, *Arthropoda*, USA, California 2149.
effects on community composition, soil, nontarget organisms 5260.
effects on feeding behavior, circadian rhythms, *Glossina austeni*, *Protophormia terraenovae* 5772.
effects on feeding, food utilization, *Ricinus communis* host plants, *Achaea janata* 7412.
effects on foraging behavior, crop fields, *Apis mellifera* 4475.
effects on hormones release, hyperlipemic hormone, corpora cardiaca, *Locusta migratoria* 5797.
effects on mounds movements, *Solenopsis* 2652.
effects on nontarget organisms, colonies, management, apiculture, *Apis mellifera* 1433.
effects on nontarget organisms, toxicity, colonies, *Apis mellifera* 3446.
effects on parasitoids emergence, survival, *Amitus hesperidum*, *Prospaltella opulenta* 2245.
effects on population growth, *Nilaparvata lugens* 6111.
effects on population levels, fecundity, longevity, *Tetranychus turkestani* 2893.
effects on potato leaf roll virus disease transmission, abundance, crop fields, *Aphididae* 3042.
effects on survival, sterility, *Spodoptera littoralis* 1837.
effects on tomato leaf curl virus disease transmission, *Lycopersicon esculentum* crop yield, *Bemisia tabaci* 3705.
effects on webs spinning, *Tetranychus cinnabarinus* 1048.
efficacy, chemical control, *Delia antiqua* 3733.
efficacy, field trials, *Agrotis orthogona* 9312.
efficacy, geographical variations, seasonal variations, *Lissorhoptrus oryzophilus*, USA 3013.
efficacy, mortality, *Blissus leucopertus leucopertus* 5771.
efficacy, pest control, *Ambelosoma esculentum* host plants, *Aphis gossypii*,

Subject Index

Insecticides, (continued)

Amrasca biguttula biguttula 7683.
 efficacy, pest control, Amrasca biguttula biguttula 7756.
 efficacy, pest control, Athegona soccata, Chilo partellus, Contarinia sorghicola 5396.
 efficacy, pest control, Heliothis virescens 1474.
 efficacy, pest control, Oligonychus pratensis, USA, Texas 1473.
 efficacy, pest control, Plutella xylostella, Pieris rapae, Trichoplusia ni 3799.
 efficacy, pest control, Sphenophorus callosus, Zea mays 2250.
 efficacy, toxicity, Blissus leucopertus leucopertus 9024.
 efficiency, persistence, chemical control, Musca domestica 697.
 eldridge, methomyl, synergists, pipernyl butoxide, MGK 264, DEF, mortality, Spodoptera littoralis 9023.
 encapsulation, environmental impact, apiculture, economics 7684.
 endosulfan, acute toxicity, Enallagma 292.
 evaluation, wind tunnels, Cyanamid AC-222.705, Montedison M-9270, Montedison M-9580, Montedison M-9751, Anopheles quadrimaculatus, Psorophora columbica 6203.
 evaluation, behavior, effects on pest control, Coptotermes formosanus 4606.
 fenvalerate, chemical control, pests, field trials, Phyllosticta citrella 8445.
 fenvalerate, permethrin, measuring techniques, chromatography, GLC, pesticide residues, Acrididae, Anas 1833.
 field trials, chemical control, Calocoris norvegicus, Sidna kinbergi 8476.
 fumigants, toxicity, productivity, comparative studies, Sitophilus oryzae, Tribolium castaneum 1074.
 gamalin, Phosphorus virescens, Nigeria 3002.
 growth, inhibition, larvae, Spodoptera frugiperda 3445.
 Isaria felina isariensis, chemical control, Insecta 2224.
 Isaria felina isariensis, effects on Galleria mellonella 2223.
 isazaphos, chemical control, larvae, Adoretus testulatus 5405.
 isofenphos, nephrotoxicity, systemic effects, efficiency, Athegona soccata 7777.
 larvicides, malaria vectors, reviews, Culex 8409.
 larvicides, oviducts, xanthene, effects on, Musca domestica 1041.
 lindane, DDT, toxicity, irradiation, Tribolium castaneum 7418.
 lindane, effects on carbohydrates, lipids, Periplaneta americana 5791.
 lindane, resistance mechanisms, Musca domestica 1849.
 malathion, effects on, diapause induction, Tetranychus urticae 1095.
 malathion, monocrotophos, dimethoate, quinalphos, fenvalerate, phosalone, fenitrothion, endosulfan 1843.
 Malathion, pesticide resistance inheritance, Anopheles stephensi 304.
 malathion, pirimiphos, diflufen, toxicity, Sitophilus granarius 5769.
 methomyl, chemical control, pesticide residues, Spodoptera frugiperda 5416.
 methomyl, pest control, mortality, eggs, larvae, Heliothis punctiger, Heliothis armiger 5380.
 methyl parathion, azinphosmethyl, malathion, permethrin, fenvalerate, toxicity, Anthonomus grandis grandis 9026.
 methyl parathion, decamethrin, perthane, effects on, reproduction, mortality, Nilaparvata lugens 306.
 methyl parathion, pesticide resistance, Heliothis virescens 4221.
 methyl parathion, toxicity, chemical control, Heliothis virescens 4635.
 monocrotophos, pest control, toxicity, mortality, Anthonomus moorei 1844.
 monocrotophos, toxicity, pesticide residues, Pusa falguna, pest control, Amrasca biguttula biguttula 2653.
 monophenol monooxygenase, peroxidase, effects on activity, Protophormia tenax 9029.
 neurotoxins, pyrethroids, effects on, nervous system, Periplaneta americana 1040.
 parathion, absorption, roots, crops 7747.
 parathion-methyl, chemical extraction, methodology, bioaccumulation Apis mellifera 1069.
 particle size, pesticide applications, chemical control, Simulium 6185.
 permethrin, cypermethrin, topical applications, penetration, metabolism, Wisena cervina 5787.
 permethrin, fenvalerate, chemical control, crop protection, grasses, Heliothis armiger 728.
 permethrin, fenvalerate, tetrachlorophen, ear tags, cattle, chemical control, Musca autumnalis, Haematobia irritans 9257.
 permethrin, malathion, toxicity testing, Aedes triseriatus, Culex pipiens pipiens 3438.
 permethrin, pest control, Thynodotus ephemeriformis 2197.
 permethrin, seed treatments, chemical control, larvae, Delia coarctata 6133.
 persistence, stored products pest control, Callosobruchus chinensis 7770.
 persistence, toxicity, Trichogramma perkinsi, Trichogramma australicum 3020.
 pest control, avoidance behavior, Coptotermes formosanus 8554.
 pest control, Anticarsia gemmatilis, grazing, Glycine max 2003.
 pest control, Aphis nerii 722.
 pest control, cattle, Amblyomma americanum 8583.
 pest control, chemical control, Breviceps brassicae 7780.
 pest control, chemical control, Diacrisia obliqua 7702.
 pest control, chemical control, Holotrichia serrata 5376.
 pest control, chemical control, Musca domestica 697.
 pest control, chlorfenvinphos, chlorpyrifos, Delia brassicae 2210.
 pest control, chlorfenvinphos, Delia brassicae 2262.
 pest control, comparative studies, Epitrix cucumeris 1426.
 pest control, crop fields, Athalia proxima, Lipaphys erysimi, Concinella septempunctata 7743.
 pest control, crop fields, efficiency, Aphididae 3742.
 pest control, crop fields, Sorghum bicolor, Chilo partellus 7670.
 pest control, crop fields, Spodoptera littoralis, Brassica oleracea capitata 8439.
 pest control, Dasyneura lini 8451.
 pest control, Dendroctonus frontalis, Pinus 8484.
 pest control, economics, Phyllotreta, Brassica campestris crop fields, Canada 8534.
 pest control, effects on crop yield, Brassica napus, Delia brassicae, Myzus persicae 3039.
 pest control, efficacy, acetoxys, Anopheles quadrimaculatus, Aedes taeniorhynchus 8403.
 pest control, efficacy, Choristoneura occidentalis 8542.
 pest control, efficacy, Thaumetopoea pityocampa 3833.
 pest control, environmental protection, population levels monitoring, Insecta 3714.
 pest control, Glossina tachinoides, Glossina palpalis 9251.
 pest control, Gossypium, crop protection, Amara devastans, Aphis gossypii, Heliothis armiger, Bemisia tabaci, Thailand 4622.
 pest control, Heliothis, USA, Mississippi 693.
 pest control, horticulture, Saissetia coffeae 3792.
 pest control, houses, Blattella germanica 3789.
 pest control, Insecta, Gossypium, Nigeria 5399.

Insecticides, (continued)

pest control, Leucodermis orbonalis, Salanum melongena crop fields 7678.
 pest control, Lycopersicon esculentum crop fields, Insecta, New Caledonia 4558.
 pest control, Orseola oryzae, China, People's Rep 1013.
 pest control, penfluron, diflufenuron, inhibition, sexual reproduction, Poekilocerus pictus 4619.
 pest control, pesticide applications, Aedes taeniorhynchus 7677.
 pest control, pesticide applications, crop fields, Insecta 8551.
 pest control, pesticide applications, Phyllosticta citrella 7718.
 pest control, Phytomyza atrincola, Estella aucklandi 7711.
 pest control, Podagria uniflora, Podagria sjoestedti, Nigeria 5402.
 pest control, roots, Capsicum annuum, Insecta 7695.
 pest control, seedlings, Abies amabilis, Aedeops piceae 5302.
 pest control, Spodoptera littoralis 5355.
 pest control, stored products, Callosobruchus maculatus, Callosobruchus chinensis 7669.
 pest control, stored products, Insecta 2190.
 pest control, stored products, pests 8545.
 pest control, stored products, Sitophilus granarius, Tribolium confusum, Rhyzopertha dominica 7768.
 pest control, traps, economics, Glossinidae, Ivory Coast 4549.
 pest control, Tricium, Microtermes obesi 5371.
 pest control, yield, crop fields, Phileus spinarius, Medicago sativa 8561.
 pest control, yield, Vigna unguiculata, Chalcomorpha aeneus 8540.
 pesticide residues, contamination, pollinators, Megachile rotundata 4317.
 pesticide residues, parathion, toxicity, effects on, Apis mellifera, cells, chemical analysis 298.
 pesticide residues, toxicity, pollution effects, Conophthorus monticola 296.
 pesticide resistance, detoxification mechanisms, Musca domestica 1056.
 pesticide resistance, enzymatic activity, carboxylesterase, Nephrotettus cincticeps, Japan 5042.
 pesticide resistance, enzymes activity, Musca domestica, Malaysia 5774.
 pesticide resistance, pests, stored products, Plodia interpunctella, Ephestia cautella, Tribolium castaneum, USA, Southeast 4225.
 pesticide resistance, population genetics, mathematical models, Glossina morsitans moritans 3122.
 pesticide resistance, population studies, Nephrotettus cincticeps, Taiwan 8504.
 pesticide resistance, selection, population genetics, Hylemya aniqua 8665.
 pesticide resistance, stored products, pests, Plodia interpunctella, Ephestia cautella, Tribolium castaneum 8305.
 pesticide resistance, strains, Musca domestica 4233.
 permethrin, chemical control, pests, Anodonta auranti 6906.
 permethrin, toxicity, Phaedon cochleariae 1019.
 phorate, curcumin, rhythmic, enzymatic activity, Acheta domesticus 1794.
 phorate, metabolites, toxicity, Aphis fabae 5777.
 phorate, toxicity, Myzus persicae, Breviceps brassicae 2658.
 pirimiphos, carbaryl, methamidophos, toxicity, Myzus persicae, Coleomegilla maculata leali, Chrysopa oculata 318.
 pirimiphos, methyl, effects on nontarget organisms, population levels, Carabidae, Staphylinidae, Czechoslovakia, Jerise Hory Mts. 7571.
 plant extracts, toxicity, Bagrada cruciferarum, Centraetherium anthelmintum, Cyperus rotundus, Styracis nas-vomica 6625.
 pollution effects, benthos, streams, Insecta 5437.
 pollution effects, mutagenicity testing, Drosophila melanogaster 4684.
 pollution effects, streams, abundance, organic matter, Insecta 7820.
 poultry ectoparasites, chemical control, Ornithonyssus sylvarum 1387.
 propoxur, permethrin, fenvalerate, pesticide resistance, strains, Nilaparvata lugens 4222.
 pyrethroids, susceptibility, pesticide resistance, methyl parathion, Heliothis virescens, USA, South Carolina 4226.
 pyrethroids, toxicity, selectivity, natural enemies, pests, Insecta 7408.
 quassinsoids, toxicity, antifeedants, larvae, Locusta migratoria migratorides 2660.
 sesamex, dieldrin, ganglia, electrophysiological recording, toxicity, Blaberus discoides 5778.
 storage, malathion, DDT, lindane, carbaryl, dichlorvos, efficacy, Callosobruchus maculatus, Callosobruchus chinensis 7684.
 stored products pest control, efficacy, Insecta 676.
 susceptibility, host plants, Spodoptera frugiperda 301.
 susceptibility, pest control, Hypophenemus hampei 8199.
 susceptibility, strains, Anopheles 3441.
 susceptibility, toxicity tests, pests, Locustana pardalina 5039.
 synergism, malathion, kumari, Nephrotettus cincticeps 3434.
 synergism, toxicity, Tribolium castaneum 7405.
 systems, chemical control, aldicarb, thiofanax, bufencarb, Bemisia tabaci, Empoasca kraemeri 6196.
 systems, chemical control, Triona infestans, Canis familiaris 6059.
 systems, phorate, disulfoton, dimethoate, toxicity, pesticide residues, Aphis gossypii 7413.
 temephos, pest control, Simulium ornatum, France, Neune R. Valley 4546.
 temephos, pollution effects, community composition, streams, Insecta 7021.
 tepe, pest control, histopathology, oogenesis, Culex pipiens fatigans 1835.
 thiobisformamides, toxicity, penetration, Diatraea grandiosella 9030.
 thiobisformamides, topical application, penetration, metabolism, Diatraea grandiosella 4232.
 titling, flight activity, chemical control, Synanthedon rhododendri, pheromone traps 700.
 topical applications, toxicity, companion, chemical control, Callosobruchus maculatus 5781.
 toxicity, acetoxys, drift, Glossina morsitans, Botswana 1469.
 toxicity, Acanthosiphum fasciculatus 8204.
 toxicity, bacteria infection effects on, Anthonomus grandis grandis 8188.
 toxicity, bencidocarb, pirimiphosmethyl, Culex quinquefasciatus, Anopheles stephensi 3442.
 toxicity, carbaryl, Leucophaea maderae 1846.
 toxicity, Coccinella septempunctata, Breviceps brassicae 7401.
 toxicity, companion, efficacy, Hypera postica 6624.
 toxicity, Diabrotica virgifer virgifer, Diabrotica undecimpunctata howardi 8194.
 toxicity, diapause effects on, Diatraea grandiosella 4234.
 toxicity, effects on esterase polymorphism, Choristoneura occidentalis 8202.
 toxicity, efficacy, mephosfolan, Chilo partellus 3031.
 toxicity, eggs, larvae, adults, Spodoptera littoralis 6615.
 toxicity, Insecta 1067.
 toxicity, larvae, Simulium ornatum, Simulium equum 5053.
 toxicity, lindane, carbaryl, chlorpyrifos, Dendroctonus brevicornis, Enoclerus

Insecticides, (continued)

- lecontei, *Tennochila chloridea* 2228.
 toxicity, methidathion, citrus spray oil, *Aonidiella auranti* 5048
 toxicity, methyl bromide, phosphine, 7 species, *Coleoptera* 1073.
 toxicity, neem oil, plant extracts, *Azadirachta indica*, *Culex fatigans* 7396.
 toxicity, nontarget organisms, *Heliothis predators* 8172.
 toxicity, nontarget organisms, *Megachile rotundata* 4224.
 toxicity, nontarget organisms, *Trichogramma perkinsi*, *Trichogramma australicum* 5050.
 toxicity, *Ostrinia nubilalis* 8626.
 toxicity, parasites, *Apanteles omigis* 2655.
 toxicity, parasites, *Copidosoma koehleri* 7411.
 toxicity, pest control, *Aphis craccivora* 7417.
 toxicity, pest control, *Holotricha consanguinea* 7415.
 toxicity, pest control, *Tryporyza incertulas* 1488.
 toxicity, pesticides (organophosphorus), stored products pests, *Coleoptera* 7403.
 toxicity, pests, *Lipaphis erysimi*, *Aphis craccivora* 7410.
 toxicity, *Phorodon humuli*, *Aphis fabae* 9028.
 toxicity, soil moisture effects on, *Lachnostera consanguinea* 5337.
 toxicity, structure-activity relationships, *Musca domestica*, *Phaenon coehleanae* 2661.
 toxicity, synergism, *Ostrinia nubilalis* 3440.
 toxicity, synergism, pesticide resistance, *Labopa* 1841.
 toxicity, temperature effects on, permethrin, fenvalerate, deltamethrin, *Trichoplusia ni*, *Spodoptera frugiperda*, *Heliothis virescens* 8206.
 toxicity testing, body weight effects on lethal dose, statistical analysis, *Choristoneura occidentalis* 8207.
 toxicity testing, pest control, *Diabrotica undecimpunctata undecimpunctata* 8189.
 toxicity testing, soil bioassays, larvae, *Diabrotica undecimpunctata* 4220.
 toxicity tests, methodology, molting, *Heliothis virescens*, *Heliothis zea* 3429.
 toxicity tests, mutants, *Tribolium castaneum* 7397.
 toxicology, mode of action, reviews, *Insecta* 5802.
 tralormethrin, galactophryn, metabolism, degradation, *Trichoplusia ni*, *Musca domestica*, *Periplaneta americana* 316.
 trichloron, toxicity, sterility, *Blattella germanica* 1829.
 weathering, effects on efficacy, *Epiplachia virginiopectinata* 7712.
Insects
 origin, wings, evolution 774.
 pollination, host plants, flowering phenology, USA, Missouri 2047.
 vitellin, biochemical characteristics 6549.
Insemination
 fecundity, aging, *Plodia interpunctella*, *Ephestia cautella* 9062.
Insect sequences
 insertions sites, histone H3 genes, cDNA nucleotide sequence, gene libraries, *Drosophila melanogaster* 8628.
 organization, tRNA 5S genes, *Drosophila melanogaster* 9397.
 ribosomes rDNA, mobility, *Drosophila melanogaster* 3081.
Instars
Culex pipiens, *Culex salinarius*, toxicity tests, mortality, *Bacillus sphaericus*
 development, cytology, epithelium, *Locusta migratoria* 3465.
 developmental stages, *Rhyacionia rigida* 6273.
 hemolymph, hormones, ecdysteroids, molting, *Mamestra brassicae* 7327.
 host parasite interactions, parasitoids, embryogenesis, *Ostrinia nubilalis*, *Macronoctua grandis* 4489.
 larvae, biology, *Scaphophis includens* 1973.
 Leiopteron uniformis, parasites, hosts, *Lygus hesperus*, biology, rearing 2022.
 morphology, *Apache degeeri* 3254.
 morphology, *Aradus foliaceus*, *Aradus mirabilis* 8032.
 zoophagy, bionomics, *Simulium chutteri* 8880.
 morphology, *Campoplegineae*, *Cryptineae*, *Pimplinae* 8034.
 morphology, development, *Maruca testalis* 74.
 morphology, *Mesaphonura sylvatica*, *Mesaphonura yosii* 6486.
 morphology, nymphs, *Ornithodoros toleida* 4933.
 morphology, pests, *Phragmocossia albida* 4100.
 morphology, taxonomy, keys, *Hellula rogatalis*, *Hellula* 1657.
 morphology, taxonomy, keys, *Pyraustini* 844.
 morphology, taxonomy, keys, *Quernaaspis*, *Neoguernaaspis* 1713.
 oviposition, functional morphology, *Eyprepocnemis alacis* 461.
 pathogens susceptibility, temperature effects on, *Bacillus*, *Aedes stimulans* 1817.
 polymorphism, colonial characteristics, *Macrotermes michaelseni* 435.
Papillia japonica, intraspecific relationships, competition, population density 2862.
 sternal gland, trail pheromone secretion, *Trinervitermes bettonianus* 3374.

- Institutions**
 wildlife conservation, *Insecta*, British Isles, England 2125.
 wildlife conservation, *Lepidoptera*, British Isles 2124.
 wildlife conservation, nature reserves, *Invertebrata*, British Isles 2126.
Instruments
 design, electrophysiological recording 1680.
 electronic equipment, measurements, ingestion, saliva, *Nephotettix cincticeps* 1699.
 feeding apparatus, design, blood sucking *Insecta* 1700.
 measuring techniques, activity patterns, *Insecta* 1685.
 samplers, design, *Insecta* 1697.
 sampling methodology, *Acari* 1683.
Inulin-like peptides
 purification, *Manduca sexta* hemolymph, *Apis mellifera* royal jelly 5685.
Integrated control
 biological control, chemical control, cultural control, *Chilo partellus* 3033.
 biological control, *Planococcus citri*, *Dialeurodes citri*, Italy 3722.
 development, resource management, socio-economic aspects 5385.
 economics, crop protection, insecticides, *Oryza sativa*, Philippines 5391.
 Glossina, reviews, Africa 6052.
 insecticides, parasites, *Phthorimaea operculella*, *Copidosoma koehleri* 7411.
 management, pests, *Dendroctonus frontalis* 9329.
 methodology, *Psylla pyricola*, USA, Washington 3008.
 overwintering populations, *Pectinophora gossypiella* 3021.
 pest control, *Atherigona soccata* 4570.
 pest control, crop fields, *Chilo partellus*, *Zea mays* 5406.
 pest control, crop fields, efficiency 4536.
 pest control, crop protection, environmental protection, *Insecta* 3712.
 pest control, crop protection, pesticide applications, environmental protection, *Insecta* 3715.
 pest control, economics, *Insecta* 3711.
 pest control, forests 4561.

Integrated control, (continued)

- pest control, *Insecta*, *Gossypium* 9319.
 pest control, life cycle, host plants, *Rhyacionia frustrana*, USA, California 5318.
 pest control, orchards, *Tetranychidae*, *Malus pumila* 8517.
 pest control, sampling methodology 4533.
 pesticides, effects on nontarget organisms, *Amblyseius fallacis* 5046.
 pests, ecological evaluation, orchards, *Malus*, *Insecta* 7730.
 pests, horticulture, New Zealand 6082.
 pests, predators, pesticides, mathematical models 8465.
 pests, reviews, *Solanum tuberosum*, *Insecta* 6209.
Intersegment
 abdomen, sex pheromone biosynthesis, *Musca domestica* 8095.
 biochemical analysis, proteins, structure, *Heliothis zea* 885.
 catalase activity, localization, *Pieris brassicae* 8900.
 chitin synthase, characterization, inhibition, *Trichoplusia ni*, *Hyalophora cecropia* 6559.
 chitobiase, purification, characterization, *Bombyx mori* 7282.
 cuticle deposition, *Periplaneta americana* 4953.
 electrical properties, physiology, piezoelectricity, pyroelectricity, *Blaberus giganteus* 886.
 exocrine glands, sexual dimorphism, *Pentatomidae* 985.
 structure, molting hormones, nymphs, *Ornithodoros moubata* 3340.
 temperature, effects on coloration, *Aphidius smithi* 7349.
 ultrastructure, secretions, *Zygaena* 6595.
Intensity
 mating behavior, mathematical models, *Drosophila* 1144.
 parasitism, host-parasite interactions, *Villa brunnea* 2035.
Interaction
 cells, leg regeneration, *Insecta* 4251.
 hormones, effects on cuticle molting, *Manduca sexta* 3493.
 pathogens, parasites, pest control, models 1455.
Interbreeding
 strains, parasitoids, *Apanteles melanoscelus*, *Lymantria dispar* 8324.
Interference
 competition, soil-dropping behavior, *Tetramorium caespitum*, *Nomia melanderi* 5891.
 sex determination, mutation, germ cells, *Drosophila* 3906.
Intersexes
 mutants, histology, reproductive organs, genitalia, *Drosophila melanogaster* 5064.
 parasites, *Ulonia cognata*, Germany, Fed. Rep., Bavaria, Mumauer Moos 4730.
 sex determination, genetics, *Lymantria dispar*, Japan 3918.
Interspecific hybridization
 development, *Scaphytopius nitridus*, *Scaphytopius californiensis* 8220.
 mating behavior, courtship, *Brachymeria laus*, *Brachymeria intermedia* 2741.
 mating behavior, genetic control, *Drosophila arizonensis*, *Drosophila mojavensis* 3108.
 population genetics, DNA reassociation, *Drosophila* 1557.
 sympatric populations, *Dolichopoda geniculata*, *Dolichopoda laetitia* 7863.
 sympatric populations, *Lygus elisus*, *Lygus desertinus*, Arizona 3607.
Interspecific relationship
Aspergillus flvus, *Penicillium oxalicum*, *Fusarium moniliforme*, *Zea mays*, *Ostrinia nubilalis* 6899.
Interspecific relationships
 aggression, feeding behavior, *Trigona*, *Phaenotermis superciliosus*, Costa Rica 3571.
 aggressive behavior, colonies, *Fornica lugubris*, *Fornica cunicularia* 5159.
 anti-predator behavior, foraging behavior, *Latreuteles hesperus*, *Pagononymex rugosus* 6731.
 association, chemical control effects on, *Formicidae*, *Diatraea saccharalis* 609.
 association, eggs, *Eulima puno*, *Camponotus inca* 7585.
 association, *Formicidae*, *Harknessellus tius*, *Glaucopsyche lygdamas*, *Celastrina argilosa* 7600.
 association, *Mymecophagus excavaticollis*, *Solenopsis* 9218.
 attractancy, *Schinia miis*, *Spodoptera eridania* 5120.
 attractancy, sex pheromone, *Pyralis farinalis*, *Amyelois transitella* 5839.
 attraction, pheromones, *Dendroctonus brevicornis*, *Ips paraconiformis* 1929.
 biological control, survival, *Musca vetustissima*, *Onitis alexis*, *Onthophagus binodis*, *Onthophagus ferox*, Australia 1308.
 bioluminescence, mimicry, predation, *Phonurus* 1303.
 breeding sites, fruits, *Penicillium*, *Drosophila immigrans* 6051.
 competition, coexistence, effects on, body size, caves, *Pseudanophthalmus menetriesi*, *Pseudanophthalmus pubescens* 1488.
 competition, effects on females mate selection, *Chauliognathus pennsylvanicus* 1142.
 competition, food sources, *Phyllotreta striolata*, *Phyllotreta cruciferae*, *Pieris rapae* 6829.
 competition, herbivores, mortality, *Nolotista elongata*, *Megalocera recticornis* 3631.
 competition, parasites, *Chrysomelidae*, *Heliconia*, Costa Rica 4370.
 competition, parasitoids, *Heliothis virescens* 2811.
 competition, *Scarabaeidae*, *Papillia japonica*, USA, North Carolina 600.
 courtship, reproductive isolation, *Drosophila mojavensis*, *Drosophila arizonensis* 402.
 decay fungi effects on softwoods, food preferences, *Coptotermes acinaciformis* 1196.
 defense mechanisms, *Reticulitermes flavipes*, *Reticulitermes virginicus*, *Solenopsis geminata* 1795.
 factors affecting horizontal distribution, *Aedes triseriatus* 4482.
 foraging behavior, flowers, *Bombus*, *Symphidae* 2115.
 fruit trees, pests, biological control, *Aphytis lepidosaphes*, *Leptomastidea beckii*, Spain, Valencia 1458.
 galls, *Asphondylia helianthiglobulus*, *Rileyia americana*, *Torymus advenus*, *Torymus*, USA, Pennsylvania 5182.
 herbivores, plant communities, *Hesperotettix viridis*, *Gutierrezia sarothrae*, *Nachreanthra canescens*, USA, New Mexico 2063.
 herbivores, population density, community composition, algae, *Diptera*, USA, California 3858.
 host plants, defoliation, *Canna edulis*, *Calpodex ethiuis*, Mexico, Sinaloa, Mazatlan 5967.
 host plants, *Endothenia daeckiana*, *Sarracenia purpurea*, Canada, Quebec 4328.
 host-parasite interactions, *Aphididae* 1221.
Hydrellia valida, *Opius*, *Pteromalus*, *Symptelium*, USA, Florida, Oyster Bay 3621.
 infection, *Zea mays*, *Aspergillus flvus*, *Ostrinia nubilalis* 9272.
 life history, *Leguminosae*, *Bruchidae* 1388.
 mate selection, pairing, *Odonata* 3522.
 movements, encounters, mathematical models, *Arthropoda* 6788.

Subject Index

Interspecific relationships, (continued)

- mutualism, Dendrocladus needstus, Dendroctonus frontalis 500
mutualism, nesting behavior, colonies, Melipona flavipes, Melipona fasciata 6985
mutualism, Trigona hyalinata, Aconophora flavipes 6750
parasites, associations, Phenacoccus manihoti, Congo 1222
parasites, infectivity, evolution, Hymenolepis citelli, Tribolium confusum 8998
parasitism, community composition, Indomyrmex humilis, Planococcus citri.
Saisssetia oleae, France 3612.
pheromones effects on males activity patterns, Dictyoploca japonica, Philoanomia
cynthia 2761.
phoresy, Bezzi bivittata, Leptus, Dasylethes oppressa, Digamassellus 6040.
pollination, dispersal, Pedicularis, Bombus, USA, Alaska, Alaska 4404.
pollination, Listeria ovata, Ichneumonidae, Symphyta, Coleoptera, Diptera, Sweden
5204.
pollination, outcrossing, Asclepias syriaca, Bombus 6780.
pollinators, plants, mathematical models 523.
pollinators, pollination, Trifolium pratense, Bombus 5195.
population decline, host plants, Zygaena trifolii decreta, Zygaena lonicerae,
British Isles 5224.
predator-prey interactions, Orius insidiosus, Sericophytus variabilis 3613.
raiding behavior, colonial characteristics, social behavior, Chalcidoxenus
muellerianus 6994.
reproductive behavior, natural selection, Pteropyga, Afrocimex, Xylcoris 1152.
resource utilization, foraging behavior, niche breadth, Bombus, Sweden 4480.
sex pheromone attractancy, Pyralis farinalis, Amyeloid transietella 9076.
sexual behavior, aggregation behavior, Megalotrypa 409.
sexual reproduction, Amblyomma hebraeum, Amblyomma variegatum 5486.
silk repellents, Dictyna, Malus 3839.
stratification, sampling, cluster analysis, orchards, Aphididae 6466.
sympatric populations, niche overlap, Morpho granadensis polybaptus, Morpho
peleides lundia, Costa Rica 5141.
tactile discrimination, sex, Notonecta alauca 414.
temporal variations, population numbers, horses, Tabanidae 1376.
webs construction, Dendromyrmex charitellus, Dendromyrmex fabricii 2272.
Intestinal environment,
ecological distribution, adaptations, Aepus marinus, Aepus robbini, British Isles
Coast 5230.
new records, predation, Nematoda, Staphylinus ater, British Isles, Scotland,
Ythan Estuary 8362.
Intestinal microflora,
distribution, abundance, Schistocerca gregaria 2012.
Intestinal parasites,
Arthropoda, Zenaida macroura, Zenaida asiatica, USA, Florida 3582.
Hirmocystis leproli, Lepropus 2128.
Intraspecific hybridization,
heterosis, population genetics, Drosophila ananassae, India 3915.
hybrids, systematics, Muellerianella brevipennis, Muellerianella extrusa,
Muellerianella farmari 5487.
Zygaena transalpina alpina, Yaena transalpina tilaventa 9421.
Intraspecific relationships,
aggregation pheromone, dispersion pheromones, effects on larvae, Blattella
germanica 1161.
aggression, castes, colonial characteristics, Monomorium pharaonis 3838
aggressive behavior, colonies, Fomica lugubris, Fomica cunicularia 5159
association, Polistes metricus 1480
cannibalism, associations, host plants, larvae, Dacnusa obliqua 1209
cannibalism, developmental stages, spatial distribution, ponds, Notonecta lunata,
Notonecta undulata 7017
competition, food, growth regulators, larvae, Aedes aegypti 3618
competition, mating behavior, Argemone discrepans 1911
competition, parasitoids, population density effects on host searching behavior,
Ventura canescens 3652
competition, spatial distribution, foraging behavior, colonies, Pogonomyrmex
badius 2006
effects on workers egg laying, Bombus terrestris 469
extracut, effects on survival, Apis mellifera 1947
fighting, Salticus scenicus 1195
foraging behavior, anti-predator behavior, freshwater environments, Notonecta
hoffmanni 7819
instars, Popillia japonica, competition, population density 2862
nesting behavior, site selection, Bemix pruinosus 9356
oviposition deterrents, pheromones, Rhagoletis basiola 1920
parasitology, Arrenurus valencius, Ischnura ramburi, Guatemala, Laguna Chechuy L
503
parental behavior, agonistic behavior, females, Sphecx ichneumonensis 9215,
predation, larvae, Epicauta atrata, eggs, Epicauta pestifera, Epicauta vittata,
Epicauta immaculata, Epicauta occidentalis 9125
resource partitioning, oviposition deterrents, pheromones, Dacus cecurbitae 5850
resource utilization, foraging behavior, niche breadth, Bombus, Sweden 4480
spatial distribution, nesting behavior, Bemix pruinosus 5235
superparasitism, fecundity, Trichogrammatoida 1226
zoogeography, variations, morphology, Decticus verrucivorus, Decticus albifrons
4701.
Introduced species,
apiculture, environmental impact, Apidae 6207
biological control, infection, parasitism, Macrocentrus grandii, Ostrinia
nubilalis 6039
biological control, weed control, Peraption antiquum, Emex australis, Australia
6078
biological control, weed control, Ulex europaeus, Apion ulicis, Apion scutellare,
Agonopterix ulicetella, New Zealand 5335
dispersal, geographical distribution, Chrysomya chloropyga, Chrysomya
megacephala, Chrysomya albiceps, Brazil 9172
dispersal, parasites, Aphidius edayi, effects on, Acyrthosiphon pisum, New
Zealand, Helensville 506
geographical distribution, Apis mellifera, South America 3948
geographical distribution, morphology, Poecilocryptus formicophilus, USA 6333
geographical distribution, Psallus saiceus, Canada, British Columbia 4007
geographical distribution, range, Harpalus rufipes, North America 3153
geographical distribution, Rhinoceros percarpus, Rhinoceros castor, USA 790
host plants, oviposition, feeding behavior, Cruciferae, Pieridae 2048
new records, geographical distribution, Delia coarctata, North America 3158
occurrence, geographical distribution, Procoptera, Hawaii 7888
occurrence, insects, Eure 9451
occurrence, wood, Platypodidae, Israel 9464

Introduced species, (continued)

- parasitoids, population decline, Eriborus terebrans, Lydella thompsoni,
Macrocentrus grandii, USA, Iowa 6008
pasture, dung, recycling, economic importance, Geotrupes, USA 4654
pest control, Limnomyza trifolii, British Isles 6896
pests, biological control, predators, Parabemisia mynace, USA, California 1435
pollinators, population establishment, orchards, Osmia lignaria propinqua 9295.
population dynamics, Tipula paludosa, North America 2907
population status, parasites, Eriborus terebrans, Macrocentrus grandii, USA,
Connecticut 8399
records, dipterophora, Lepidoptera, Diptera, Ireland, 4705
weed control, aquatic environment, Eichhornia crassipes, Neochetina eichhorniae,
USA, Louisiana 1254.
weed control, Insecta, USA, North Dakota 2208.
Introduction,
queens, apiculture, methodology, Apis mellifera 1415.
Introns,
characterization, nucleolus organizer region, rRNA genes, restriction
endonuclease mapping, Drosophila hydei 4664
Invaginations,
epithelium, embryogenesis, Manduca 3457.
tracheolization, flight muscles, cytoplasm, physiology, metabolism, Locusta
migratoria 343.
Invertebrates,
Dep Taxon Insects, Inst Plant Protection Res., Staphylinidae, German Dem
Rep., Eberswalde 6337.
species composition, Arachnida, Costa Rica 7124.
world genera, taxonomy, Glyptopteridae 6297
Inversion,
x chromosome, effects on gene amplification, Drosophila 5469
chromosomes, role speciation, Drosophila repleta 8638.
epistasis, fitness, Drosophila melanogaster 2319.
loci, linkage disequilibrium, recombination, Drosophila melanogaster 2313.
Inversions,
chromosomes, clones, population genetics, Drosophila melanogaster, Australia
1111.
sex linkage, chromosomes, Simulidae 5457
Invertebrata,
endangered species, rare species, wildlife conservation 2147.
environmental surveys, collections, Australia 8704.
environmental surveys, collections, Korea, Dem People's Rep. 8679
nontarget organisms, community composition, soil, insecticides effects on 5260
surveys, caves, community composition, zoogeography, Barbados, Coles Cave 5439
wildlife conservation, nature reserves, institutions, British Isles 2126
Invertebrates,
larvae, morphology, Aeshna bonariensis, Uruguay, Parque R. 865.
Inveia,
new species, morphology, taxonomy, keys, USA, Texas 3221
Inveia deceptor,
new species, morphology, taxonomy, USA, Texas 3221.
parasites, Elasmopalpus lignosellus, USA, Texas 3577.
Inveia thera,
new species, morphology, USA, Texas 3221.
Inveia usta,
new species, morphology, USA, Texas 3221.
Iodine,
radioisotopes, trophallaxis, dispersal, localization, Bifiditermes besoni 2554.
Iodophenol gel,
toxicity, bait, Blattella germanica 5776
Iolana iolana,
new records, geographical distribution, Spain 7076.
Ion exchange,
calcium, muscles, physiology, Locusta 4122
oocytes, electropotential, Locusta migratoria 1134.
water uptake, digestive tract, Acrididae 239
Ion transport,
inhibitors, effects on diuresis, Glossina morsitans 4994
Ionic exchange,
physicochemical properties, prothoracic gland cells, developmental stages,
Gallina mellonella 6591
Ionizing radiation,
effects on survival, cells, defective mutant, Drosophila melanogaster 3902.
Ions,
hemolymph, Bacillus thuringiensis effects on, pathogenicity, Achaea janata,
Spodoptera litura 7378
magnesium sulfate, tolerance, ecological distribution effects on, saline
environments, Aedes taeniorhynchus, Aedes dorsalis 8101
transport, cell membranes, portosome particles, Manduca sexta 3324
Ipmimorpha retusa,
new records, geographical distribution, British Isles, England, Cornwall Co
3441
Ipolamide,
antifeedants, purification, Stachytarpheta mutabilis 8967
Ipomoea batatas,
host plants, rearing methodology, Pseudaulacaspis pentagona 1693
Ipomoea batatas,
crop fields, pests, abundance, diurnal variations, Cylas formicarius elegantulus
4335
host plants, pest resistance, Cylas formicarius elegantulus 6916
host plants, pest resistance, detection methodology, Diabrotica balteata 3719
host plants, pest resistance, pest control, Phyllophaga ephiala 6936
host plants, resistance variability, Cylas formicarius 1233
Ipomoea nil,
sweet potato feathery mottle virus transmission, Aphis gossypii 3819
Ipomoea setosa,
sweet potato feathery mottle virus transmission, Aphis gossypii 3819
Ipomopis aggregata,
hosts plants, oviposition deterrents, Hylemya 528
Ips,
parasitism, drought effects on, Coniferales, USA, California 4394
pests, pheromone traps, efficacy 2194
Ips amittius,
life cycle, reproduction, ecological distribution 6715
Ips avulsus,
symbiosis, nitrogen-fixing bacteria, Enterobacter agglomerans 1214

- Ips avulsus**, enzymes, assays, immune serum 1769.
food organisms, food preferences, *Thanasis dubius* 6014
pest control, trees, pheromones inhibitors 3788.
pests, pheromone traps, efficacy 2194
- Ips calligraphus**, enzymes, assays, immune serum 1769.
pests, pheromone traps, efficacy 2194
- Ips grandicollis**, enzymes, assays, immune serum 1769.
pests, pheromone traps, efficacy 2194
- Ips paracornutus**, aggregation, sex pheromone biosynthesis, mating effects on 3539
feeding behavior, *Pinus ponderosa* extractants effects on 2007
pheromones, attraction, interspecific relationships, *Dendroctonus brevicornis* 1929
pheromones biosynthesis, digestive tract 1786
pheromones biosynthesis, precursors exposure effects on 1784
streptomycin effects on pheromones biosynthesis 3352
- Ips plagiographus maritimus**, pests, landing behavior, *Pinus radiata* host plants, USA, California 3739.
- Ips sexdentatus**, hosts, parasitism, *Parasitaphelenchus* 6879
- Ips typographus**, aggregation pheromone inhibition, ipsenol, verbenone effects on 7336.
biological control, pheromone traps, attractants 706
hibernation, leaf litter, stands, *Picea* 9044
identification, morphology, sex differences 7274
life cycle, reproduction, ecological distribution 6715
pheromones traps, companion, capture efficiency, Sweden 719
predicting prey interactions, pheromones, biochemical analysis, chemotaxis 422
- Ipsidius alvarengai**, geographical distribution, Scarabaeidae, Brazil 4109
- Ipsenol**, effects on aggregation pheromone inhibition, *Ips typographus* 7336.
- Iraus**, new records, new species, collections, *Diplopoda* 851.
new records, new species, collections, *Diplopoda* 851.
new species, new records, *Cyphon simplex*, *Cyphon phragmiteticola*, *Hydrocyphon* *segrax* 3978.
new species, new records, *Ephemeroptera*, *Ecdyonurus resilli*, *Rhithrogena theisingeri* 4006
new species, taxonomy, morphology, *Croesus persicus* 6438.
new species, taxonomy, morphology, *Psychodidae* 3199.
subspecies, taxonomy, morphology, *Onthophagus ruficapillus guianensis* 7171.
parasites, species composition, *Mammalia*, *Gamsoida* 7109.
pests, life history, crop fields damage, *Pistacia vera*, *Telphusa pistaciae* 5296.
- Iraq**, geographical distribution, new records, *Agromyza* 5522.
new species, taxonomy, morphology, *Anagrus abul rassouli* 6434
new species, taxonomy, morphology, *Scrobipalpa sindibad* 6444
Quarant virus, isolation, characterization, vectors, *Hyalomma dromedarii* 5270.
- Ireland**, fecundity, larvae mortality, *Ixodes ricinus* 1126.
new records, geographical distribution, *Acrocera globulus*, *Limnia paludicola*, *Sphaerophoria loewi* 4706.
new records, geographical distribution, *Scolytus multistriatus* 4707.
new species, taxonomy, morphology, *Phora speighti* 6391.
records, introduced species, 4705.
- Iran Jaya**, new species, parasites, *Dobsonia moluccensis*, Papua New Guinea 797.
- Iridescent virus**, pathogens, *Aedes cantans*, *Aedes cinereus*, Sweden 8139.
- Iridomyrmex humilis**, interspecific relationships, parasitism, community composition, *Planococcus citri*, *Saissetia oleae*, France 3612.
new records, geographical distribution, morphology, Switzerland 7091
- Iridomyrmex pruinosus**, competition, foraging behavior, niche overlap, *Myrmecocystus mimicus*, *Myrmecocystus depilis* 5999.
- Iridomyrmex purpureus**, predation, colonies, *Ogryis genovea* 5244.
trail following behavior, diel periodicity, temperature effects, Australia 3546
- Iridoprocne bicolor**, nests, association, *Ceratophyllus*, 6873.
- Iridovirus**, replication, isolates, *Armadiillidium*, *Lepidoptera* 5745.
- Iroo**, radioisotopes, elimination, eggs production, *Drosophila melanogaster* 366.
- Irradiation**, chromosomes, meiosis, physicochemical properties, kinetochore, *Lepidoptera* 1516.
strontium 90, sterilization, control, survival, sex differences, *Glossina palpalis* 1470.
toxicity, insecticides, lindane, DDT, *Tribolium castaneum* 7418.
- Irrigation**, effects on crop fields damage, *Triticum*, *Microtermes obesi* 5372.
effects on pest control, *Malus domestica* 1385.
flooding, effects on, habitat utilization, *Aedes vexans*, USA, Florida 1389.
paddy fields, effects on breeding, abundance, *Culicidae*, USA, Louisiana 2920.
- Isaria felina**, isariins, insecticides activity, chemical control, *Insecta* 2224
isariins, insecticides activity, *Galleria mellonella* 2223.
- Isariins**, *Isaria felina*, insecticides activity, chemical control, *Insecta* 2224.
Isaria felina, insecticides activity, *Galleria mellonella* 2223.
- Isasophos**, insecticides, chemical control, larvae, *Adoretus tessellatus* 5405.
- Ischnophyllus shansiensis**, new species, morphology, China, People's Rep. 43.
- Ischnoptera**, excretory products, uric acid 928.
- Ischnura aurora**, avoidance behavior, predation, environmental conditions 1289
- Ischnura delicata**, parasites, new species, *Actinoccephalus ellipsoidus* 2627.
- Ischnura elegans**, avoidance behavior, predation, environmental conditions 1289.
- Ischnura gemina**, larvae, morphology, taxonomy 1667.
- Ischnura verticalis**, hosts, parasites morphology, *Arrenurus* 84.
hosts, parasites mouth parts, ultrastructure, *Arrenurus* 2505.
- Ischyromicrus**, new genera, taxonomy 4786.
- Ischyromicrus cognitus**, new species, taxonomy, morphology 4786.
- Ischyromicrus juliae**, new species, taxonomy, morphology 4786.
- Iserius**, taxonomy, morphology 8747.
- Islands**, biogeography, species richness, *Araneae*, South Africa Coast 6848.
new records, geographical distribution, *Sphoedodes cristatus*, Baltic Sea 3942.
population genetics, *Drosophila algonquin*, USA, Maine Coast 9435.
population genetics, evolution, geographical distribution, *Drosophila*, USA, Hawaii 5502.
salt marshes, biogeography, recolonization, *Arthropoda*, USA, Florida Coast 5264.
species composition, *Culicidae*, USSR Coast 9489.
species composition, geographical distribution, new records, *Drosophilidae*, Australia, Torres Strait 3953.
zoogeography, geographical distribution, origin, *Coccoidea*, Indian Ocean, West 4708.
- Isochromosomes**, genetics, variation, natural selection, enzymatic activity, *Drosophila melanogaster* 2337.
- Isoctate dehydrogenase (NADP⁺)**, tissues distribution, imaginal discs, *Drosophila melanogaster* 392.
- Isoodermus dimorphus**, new species, taxonomy, morphology, Tasmania 4010.
- Isoodermus planus**, taxonomy, morphology, Tasmania 4010.
- Isoallapolyol alcohol**, toxicity, carbamate insecticides, synergism, *Tribolium castaneum* 7416.
- Isoidea**, abundance, surveys, Botswana 3672.
- Isoelectric focusing**, proteinase characterization, *Insecta* 5692.
- Isoenzymes**, acetylcholinesterase, biochemical analysis, distribution, *Culex tarsalis* 189.
biochemical analysis, composition, peptide mapping, *Drosophila melanogaster* 4670.
biochemical characteristics, analysis methodology, *Culicidae* 8012.
gene frequency, adaptiveness, *Drosophila* 5451.
genes, genetics, *Triatoma infestans*, Bolivia 4668.
genes, population studies, comparison, *Triatoma infestans*, Bolivia 4692.
glycerol-3-phosphate dehydrogenase (NAD⁺), development, distribution, tissues, characterization, *Mormoniella vitripennis* 6553.
hemolymph, larvae, morphogenesis, *Apis mellifera* 5827.
luciferase, characterization, *Photinus pyralis*, *Photinus pennsylvanicus* 938.
malate dehydrogenase, eggs, *Apis mellifera* 2563.
- Isofenphos**, insecticides, systemics, efficacy, *Atherigona soccata* 7777.
pest control, *Carabidae*, *Staphylinidae* 9320.
- Isoagenus**, flight, wings, aerodynamic properties 6522.
- Isohyphibius smreczynskii**, classification, taxonomy, morphology 8842.
- Isohyphibius volubilis**, classification, taxonomy, morphology 8842.
- Isohyphibius weglarskiae**, classification, taxonomy, morphology 8842.
- Isolation**, chromosomes, methodology, *Aedes albopictus* 3082.
dengue virus, cell culture, *Aedes albopictus* 9225.
enzymes, characterization, dihydropterin triphosphate cleavage, *Drosophila melanogaster* 962.
Japanese encephalitis virus, Getai virus, *Culex tritaeniorhynchus*, *Aedes albopictus* cells 1348.
methodology, eye pigments, *Insecta* 2482.
mutation, DNA, methodology, *Drosophila melanogaster* 1509.
new species parasites, *Ranunculus olivaceus*, *Cenagrion olivaceum* 2628.
nuclear polyhedrosis virus, infection, *Spodoptera exigua* 1823.
phages, morphology, ultrastructure, *Apis mellifera*, *Bacillus larvae* 8138.
plant hosts, *Quercus*, mortality, survival, *Gracilaria*, *Bacillus* 2135.
purification, enzymes, α , α -trehalase, *Hammonia axyridis* 944.
rearing, photoperiods, humidity, locomotor activity, flight activity, *Locusta migratoria migratorius*, rearing 4261.
ribonucleoproteins, *Drosophila melanogaster* 942.
RNA polymerase, characterization, *Heliothis zea* 1511.
snowshoe hare virus, *Aedes communis*, Canada 1017.
species, pheromones, biochemical characteristics, *Tetramorium impurum*, *Tetramorium caespitum* 3348.
symbionts, yeasts like microorganisms, *Nilaparvata lugens* 1215.
viruses, blood, *Ceratomyces*, *Diabrotica undecimpunctata* 1824.
vitellogenin mRNA, fat body, *Locusta migratoria* 6569.
- Isomers**, alkyl methylcyclohexanecarboxylate, attractancy, pest control, *Blattella germanica* 3831.
fatty acids, diets, effects on growth, *Plodia interpunctella* 378.
lindane, toxicity, *Drosophila* 5040.
sex pheromone, attractancy, *Neodiprion lecontei* 3538.
synthetic sex pheromone, attractancy, *Agrotis segetum* 3356.
- Isometocoris**, taxonomy, morphology, ocelli 5579.
- Isometrus acanthurus loebli**, new species, taxonomy, morphology, Ceylon 4770.
- Isometrus besucheti**, new species, taxonomy, morphology, Ceylon 4770
- Isomychia skeca**, morphology, larvae 4846.
- Isoperla cilo**, taxonomy, morphology, *Cloperia propium* 1672.

- Isoptenaric acid**,
feeding behavior deterrents, host plants, *Pristiphora erichsonii* 623
- Isoptoda**,
soil fauna, enzyme activity, nutrient dynamics 9368
- Isopteranoli**,
defecation, enzymatic activity, population genetics, *Drosophila melanogaster* 1761
- Isoptera**,
abundance, community composition, forests, Nigeria 4460
bait, wood, decay, Liquidambar styraciflua, Gloeophyllum trabeum 704
biology, morphology, taxonomy, reviews, India 5427
chemical control, pest control, Eucalyptus 5374
colonial characteristics, nesting behavior, swarming behavior, soil, India 5426
colonies, brood care, population density, seasonal variations, India 5418
damage, control programs, tropical environment 2967
damage, pest control, species composition, India 5369
damage, plantations and zones, India 6210
fat body, ultrastructure, sexual dimorphism 4161
maze learning, conspecifics experience effects on 1165
mounds, colonial characteristics, geomorphology 3844
mounds, nest building, soil properties, Pakistan 9369
parasites, new species, Termitaria, Australia 9005
pathogens, Cardycepoides octosporus, Mexico 2626
pests, damage, crop fields, Arachis hypogaea 5360
pests, infestation, crop fields, Manihot esculenta, Brazil, Para State 4597
role, leaf litter decomposition, savannahs, South Africa 9199
seeds damage, effects on germination, yield, Triticum 5331
- Isothearyli alcohol**,
surface films, Anopheles quadrimaculatus, efficacy, pest control, Anopheles crucians, mortality 6128
surface films, pest control, efficacy, Culex pipiens 4219
- Isothermia viridis**,
diets effects on metabolism, growth, reproduction 4268
- Isothioate**,
pollution effects, uptake, Culex pipiens 4219
- Isothoma olivacea**,
abundance, habitat preferences, abundance, Mammalia 1179
- Isothoma tigrina**,
biochemistry, lipoproteins, indicators, phenotypes, ecomorphs, developmental stages 4155
- Isral**,
apiculture, nectar source, ornamental plants, Apis mellifera 7714
biological control, parasites, pathogens, pests, Persea americana 5390
cucumber mosaic virus, disease transmission, vectors, Aphis gossypii, Myzus persicae 7657
introduced species, occurrence, wood, Platypodiidae 9464
morphology, keys, species, Scenopinus, Metatrachia, Stenoptiridae 5650
new records, geographical distribution, Culicoides 9480
new records, species composition, forests, ornamental plants, Thysanoptera 9479
new species, taxonomy, morphology, Cataglyphis sabulosa 8831
new species, taxonomy, morphology, Coccus elatensis 2442
new species, taxonomy, morphology, Trémessus beaumonti 8754
new species, Tenuipalpus cupressoides, Tenuipalpus parenophyoides, Aegyptobia eremia 8724
occurrence, keys, Canacidae 4834
occurrence, Psocoptera 8841
parasites, natural enemies, Hymenoptera, Scolytidae 4372
pathogens, viruses, isolation, Culicoides 3690
pest control, pheromone traps, population dynamics, Prays citri 4594
pests, morphology, Matsucoccus josephi 8870
population dynamics, phenology, coloration, Saissetia oleae 9178
reproductive status, sex ratio, Earias insulana 9175
taxonomy, life history, developmental stages, Centrophlebotomyia furcata 4002
taxonomy, synonymy, Culicoides 8797
- Isralidae**,
species lists, distribution, abundance, Turkey 4737
- Italo-chrysa lobini**,
new species, taxonomy, morphology, Cape Verde Islands 4059
- Italy**,
biological control, integrated control, pest control, Planococcus citri, Dialeurodes citri 3722
biological control, pests, predation, Panonychus ulmi, Tetranychus urticae, Coniopteryx esbenieterseni 2813
geographical distribution, species composition, taxonomy, Geometridae 7116
homing behavior, orientation, wind, Polistes gallicus 1262
monitoring, pheromone traps, populations, Conopia myopaeformis 2889
new species, morphology, Nibionium apuanicum 1594
new species, taxonomy, morphology, Annarella ferracini, Phylloptera verruculosa, Parscora maculifemora 6455
new species, taxonomy, morphology, Polycentropus pirisimui 3234
predatory behavior types, feeding adaptations, ecological distribution, Carabidae 4446
reproductive isolation, population genetics, enzymatic activity, Phlebotomus perilewii perilewii 3133
species lists, Ephyrididae 3997
surveys, phenology, systematics, geographical distribution, Geometridae 3143
taxonomy, morphology, Aphodius 3981
taxonomy, morphology, Sepais 3998
taxonomy, nomenclature, terminology, Ecdyonurus lateralis, Ecdyonurus grandis, Ecdyonurus deluili 3145
- Italy, Abruzzo**,
surveys, species composition, new records, hosts, Ixodidae 7105
- Italy, Bormida R.**,
new species, taxonomy, morphology, Satcheliella vaillantii 3192
- Italy, Calabria**,
new records, geographical distribution, Lepidoptera 7098
surveys, new records, geographical distribution, Lepidoptera 3144
- Italy, Novara**,
morphology, mouthparts, geographical variations, altitude, Orinocarabus latreillanus 7073
- Italy, Tuscany**,
entomofauna, check lists, geographical distribution, Lepidoptera 3141
surveys, Lepidoptera 7097
- Iuridae**,
taxonomy, morphology, phylogeny 5554
- Ivermectin**,
acaricides, injection efficacy, cattle, Amblyomma americanum 4506
acaricides, systemics, efficacy, Amblyomma americanum 9268
pest control, cattle, larvae, Musca autumnalis 2173
pest control, infestation, cattle, Psoroptes communis 7640
- Ivermectine**,
disease control, scabies, domestic animals, Psoroptes ovis 6892
- Ivory Coast**,
disease transmission, population density, ecological distribution, African trypanosomiasis, Glossina palpalis palpalis 1342
new genera, new species, Margarodella desmieri 1791
new species, Ditrancocentrus 3190
new species, morphology, Scopaeus fagehi, Scopaeus girardi 1603
new species, morphology, taxonomy, Lissoccephala 1626
new species, taxonomy, morphology, Ricinoides megahanseni, immature stages, Ricinoides westerni 7156
pathogens, association, Tilachlidopsis catenulata, Paltiohytes tarsatus 6608
pest control, insecticides, traps, economics, Glossinidae 4549
pest control, onchocerciasis vectors, breeding sites recolonization, Simulium damnosum 5269
pests, biology, behavior, Saccharum officinale, Eldana saccharina 2098
rain forests, epidemiology, disease transmission, yellow fever virus, Aedes africanus 9230
trypanosomiasis, disease transmission, epidemiology, Glossina 9240
trypanosomiasis, disease transmission, population dynamics, Glossina 9264
trypanosomiasis, disease transmission, population levels, Glossina 9238
- Ivory Coast, Leraba R.**,
pest control, insecticides, deamethrin, traps, Glossina tachinoides, Glossina palpalis gambiensi 4550
- Ixodes**,
taxonomy, new species, Keys 3974
- Ixodes arboricola**,
parasites infestation, migratory species, Aves, Sweden 7549
- Ixodes brewsterae**,
new species, taxonomy, morphology 3974
- Ixodes caltherinei**,
new species, taxonomy, morphology 3974
- Ixodes corwini**,
new species, taxonomy, morphology 3974
- Ixodes dammini**,
disease transmission, babesiosis, Babesia microti, hamsters, Peromyscus leucopus 8422
parasites infestation, erythema skin lesions, rabbits, guinea-pigs 8428
vectors, Lyme disease, case reports, man, USA, Minnesota 4492
vectors, pathogen transmission, Babesia microti 635
- Ixodes hexagonus**,
nymphs, disease transmission, Babesia microti 8418
- Ixodes holocyclus**,
larvae, habitat preferences, temperature, humidity, environmental effects, survival, molting 1175
salivary gland, morphology, toxins 1800
- Ixodes macfarlanei**,
new species, Ixodes zairensis, morphology 3974
- Ixodes mitopi**,
new species, ecological distribution, Zimbabwe 12
parasites, ecological distribution, host preferences, Mammalia, Zimbabwe 519
- Ixodes ovatus**,
activity patterns 458
- Ixodes persulcatus**,
caricatures, methods, larvae, nymphs 7257
development, life cycle, diapause 9096
disease transmission, epidemiology, tick-borne encephalitis virus 9229
disease transmission, tick-borne encephalitis virus, experimental infection 9227
pest control, DDT, pesticide residues, USSR 9253
rearing methodology 8846
vectors, disease transmission, tick-borne encephalitis virus, pest control, acaricides 9252
- Ixodes redlichi**,
vectors, disease transmission, tularemia, epidemiology, USSR, Stavropol 9232
- Ixodes ricinus**,
abundance, seasonal variations, British Isles, Wales 5263
development, foraging behavior, environmental conditions, Eire 5898
disease transmission, epidemiology, tick-borne encephalitis virus 9229
fecundity, larvae mortality, Ireland 1126
life cycle, weather effects on, disease transmission, mathematical models 1361
parasites, infestation, migratory species, Aves, Sweden 7549
repellents, efficacy 4578
salivary gland parasites, pathology, morphology, Babesia microti 1005
- Ixodes sculptularis**,
infestation, guinea pigs, immune response (humoral) 9260
parasites, site preferences, domestic animals 6890
- Ixodes tasmani**,
parasites, feral populations, Felis 511
- Ixodes texanus**,
parasites transmission, Babesia loton, Procyon loton, USA, Connecticut 1004
- Ixodes trianguliceps**,
parasites, infestation, seasonal variations, Mammalia, Germany, Fed. Rep. 7547
- Ixodes uriae**,
infection, orbivirus, bunyavirus 3396
viruses, isolation, France, Brittany 4188
- Ixodes zairensis**,
new species, taxonomy, morphology 3974
- Ixodidae**,
abundance, infestation, seasonal variations, Canis 4514
biochemical characteristics, tissues, body fluids, reviews 8939
bites, new records, immune response, neurological complications, man 8411
cuticle, structure, function, reviews 5658
disease transmission, Sprochetosis, incidence, USSR, Tajikistan, Isfarin 9242
disease transmission, tick-borne encephalitis virus, epidemiology, mathematical models 9248
infestation, domestic animals, seasonal variations, Egypt 6895
infestation resistance, Mammalia 2926
isolation, Chm virus, pathogenicity 8985
larvae, habitat preferences, temperature, humidity, environmental effects, survival, molting 1175
parasites, cattle, surveys, Bulgaria 4497

Irididae, (continued)

- parasites, chemical control, cythoate 4518.
parasites, infestation, *Trichosurus caninus*, Australia, New South Wales 6776.
parasites, population dynamics, *Microtus canicaudus* 6777.
parasitism, effects on wildlife, biological control, Zimbabwe 633.
pest control, livestock, efficacy 4524.
salivary gland, role, feeding, disease transmission 2917.
species composition, seasonal variations, parasites, Leporidae, Spain, Ciudad Real 8333.
surveys, species composition, new records, hosts, Italy, Abruzzo 7105.
- Ixodidae**
dissection methodology, females genitalia 62
immunity, antibody response, man 3701
livestock pests, infestation, Barbados 1328
33 species, ecology, abundance, distribution, habitat, Ethiopia 1309
spermatozoa, maturation, accessory gland 4282
surveys, parasites, livestock, Yemen, Arab Rep. 6067
- Jaimeus evagoras**,
larvae, food plants, *Acacia ingramii*, Australia, New South Wales 2093.
- Jalisco spinosus**,
collection, storage, survival 730.
identification keys, adults, instars 3947
- Jalisco wickhami**,
identification keys, adults, instars 3947
- Jamaica**,
scabies, case reports, *Sarcoptes scabiei* 6061.
sexual reproduction, host plants, vectors, *Mycoplasma*, *Ollarianus balli* 5892.
- Janomima dannefeldi**,
taxonomy, revision, new subspecies, *dannefeldi*, *deduplicata*, westwoodi, *nigricans*, Africa 840.
- Janomima ibandana**,
new species, morphology, Africa 840
- Japan**,
age composition, breeding status, seasonal variations, *Cnaphalocrocis medinalis* 7797.
attractants, sex pheromone, pheromone traps, *Agrotis segetum* 2227
biology, host-parasite interactions, *Archippus semistructus* 872
biotypes, emergence, *Nephoteux cinctipes* 2297.
chickbrood disease, occurrence, *Apis mellifera* 1816
economics, apiculture, honey production 721
emergence, fecundity, oviposition, environmental effects, *Chilo suppressalis* 1909.
geographic distribution, *Psites* 2445.
host-parasite interactions, host plants developmental stages, assimilation, *Pryeria sinica* 981.
intersexes, sex determination, genetics, *Lymantria dispar* 3918
Japanese encephalitis virus isolation, infection, Culicidae 6614
life cycle, seasonal variations, *Hagenomyia nicaus*, *Myrmecoleon formicarius* 4339.
mass rearing, sexual reproduction, fecundity, egg production, *Dacus cucurbitae* 1850.
mating behavior, copulation, oviposition, calling behavior, *Antheraea yamamai* 1910.
morphology, geographical variations, *Systenocentrus japonicus*, *Systenocentrus uyemurai* 6496.
natural enemies, parasites, predators, seasonal variations, *Pseudaulacaspis pentagona* 2141.
new records, morphology, eggs, *Silwala brevis* 3800
new species, geographical distribution, *Basilobela parvata* 8.
new species, morphology, *Ophiomyia purpuraria*, *Amauromyza belamcandae*, *Phytomyza basegawai* 2419.
new species, morphology, taxonomy, *Trisetacus abietivagans*, *Eriophyes chibaensis* 3170.
new species, *Ortholoccobus nipponicus* 805.
new species, taxonomy, morphology, *Micreremus subglaber* 5519
new species, taxonomy, morphology, *Oedoparena minor* 7185.
new species, taxonomy, morphology, *Tectopoeus* 2.
occurrence, geographical distribution, *Cnaphalocrocis medinalis* 9475.
parasites, infection, seasonal variations, *Hexameris*, *Lymantria dispar* 5753.
pest control, greenhouses, biological control, parasites, *Trialeurodes vaporariorum*, *Encarsia formosa* 7789.
pest outbreaks, population dynamics, *Dasychira argentata* 3723.
pesticide resistance, insecticides, enzymatic activity, carboxylesterase, *Nephoteux cinctipes* 3042.
pests, biological control, parasitoids, *Torymus*, *Dryocosmus kuriphilus* 4545
pests, crops, sugar beet, *Chaetocnema coccinea*, *Chaetocnema discreta* 1241
pests, ecological distribution, population density, *Nephoteux cinctipes* 2142.
pests, new records, geographical distribution, *Pecillips cardamoni* 2359.
pests, trapping, sex lures, *Carposina niponensis*, *Grapholita molesta*.
Synanthedon Hector, *Archippus brevipennis* 5334.
pests, trapping, synthetic sex pheromone, attractants, *Homona magnanima* 5336
phenoperoid, effects on polymorphism, seasonal variations, *Lyonecia clerckella* 5236.
population genetics, sex ratios, *Phyllonorycter sorbicola* 2347.
population growth, life history, *Amblyseius longispinosus*, *Amblyseius delemoi*, *Amblyseius parki* 1184.
predation mortality, colonies, larvae, *Spilarete imparilis* 2165.
reproductive isolation, mating behavior, feeding types, *Dichocrocis punctiferalis* 1912.
seasonal variations, bait attractancy, copulation, *Shirahoshizo* pini.
Shirahoshizo rufescens, *Shirahoshizo insidiosus* 2901.
soil fauna, community composition, *Arthropoda*, species composition, *Oribatida* 8600
survival, diets, larvae, *Nilaparvata lugens* 1204.
taxonomy revision, *Circulioninae* 1599.
taxonomy, classification, phenology, *Andrena* 6433.
taxonomy, morphology, new records, *Anthomyiidae* 7177.
taxonomy, new taxa, *Anthribidae* 1608.
trapping, pheromone traps, seasonal variations, *Spodoptera litura* 2229.
- Japan, Bonin Islands**,
new species, morphology, *Tetragnatha boninensis* 1593.
- Japan, East China Sea**,
airborne dispersal, coastal environment, *Tetragnatha* 2101.

- Japan, Fukuoka, Muromi R.**,
territorial behavior, dispersal, *Calopteryx cornelia* 8612.
- Japan, Honshu**,
mutants, coloration, larvae, *Lymantria dispar* 7047.
new species, taxonomy, morphology, *Amblyseius alpicola*, *Amblyseius linivorus* 7115.
- Japan, Kiyotaki R.**,
body size, climbing, emergence, larvae, *Luciola cruciata* 3861.
- Japan, Mt. Soranuma**,
ecological distribution, altitude, annual cycles, population dynamics, *Drosophila* 4463.
- Japan, Okinawajima**,
seasonal variations, population density, occurrence, developmental stages, *Aedes albopictus* 5897.
- Japan, Sado I.**,
new species, taxonomy, morphology, *Leiobunum sadoense* 7154.
new species, taxonomy, morphology, *Tectocephus titianus* 7143.
- Japan, Sapporo**,
colonies, reproduction, polygyny, monogyny, *Myrmica ruginoides* 3843.
- Japan, Shikoku I.**,
new species, new genera, taxonomy, morphology, *Chaetotrechiana procerus* 4818.
- Japan, Tohoku**,
overwintering eggs, diapause, environmental factors, temperature, *Euxoa sibirica* 7438.
- Japan, Tokyo**,
biometrics, mating behavior, oviposition, life history, *Batocera lineolata* 5144.
- Japan, Yuyama Is.**,
life cycle, population dynamics, *Aedes iriomotensis*, *Aedes atrisimilis* 7574.
- Japan, Zempukujiri R.**,
life cycle, generations, *Chironomus yoshimatsui* 3556.
- Japanese encephalitis virus**,
isolation, *Culex tritaeniorhynchus*, *Aedes albopictus* cells 1348.
isolation, infection, Culicidae, Japan 6614.
susceptibility, *Aedes albopictus* 8986.
susceptibility, variability, geographical distribution effects on, *Culex tritaeniorhynchus*, *Culex pseudovishnui*, *Culex tritaeniorhynchus*, *Culex bitaeniorhynchus*, India 2937.
- Japys solifugus**,
new records, geographical distribution, India, Pooma 5521.
- Jassidae**,
taxonomy, morphology 6419.
- Jenkinshelea**,
new species, taxonomy, morphology, Asia 3200.
- Jenkinshelea niphae**,
new species, taxonomy, morphology, Asia 3200.
- Jenkinshelea setisforceps**,
new species, taxonomy, morphology, Malaysia 3200.
- Jenkinshelea tokunagai**,
new species, taxonomy, morphology, Thailand 3200.
- Jessopocoris**,
new genera, taxonomy, morphology, India 4851.
- Jessopocoris scutellatus**,
new species, taxonomy, morphology, India 4851.
- Jobertus chrysoelectrus**,
new records, geographical distribution, USA, Florida 5534.
- Jobbelkinia**,
new genera, taxonomy, morphology 6400.
- Johnsonophthirus**,
taxonomy, morphology 8745.
- Johnsonophthirus heliosciuri**,
morphology, adults, nymphs 8745
- Johnsonophthirus spinosissimus**,
morphology, adults, nymphs 8745
- Johnstonimyia bezi**,
new species, taxonomy, morphology, Australasian Region 4841.
- Johnstonimyia gressitti**,
new species, taxonomy, morphology, Australasian Region 4841.
- Jonespetis splendendus**,
feeding behavior, soil, organic matter, leaf litter 9129.
leaf litter decomposition, effects on soil properties 5248.
vitellinogenesis, oocytes development 9061
- Jordan**,
apiculture, methodology, economic analysis 1414.
population dynamics, pests, *Bemisia tabaci* 7622.
- Juglans nigra**,
plantations, abundance, Fulgoroidea, USA, North Carolina 1313.
- Juglans nigra**,
host plants, defoliation, pests, *Datanella integerrima*, USA, Illinois 7725.
- Jugurtia confusa**,
reproductive behavior, life history, South Africa 470.
- Julia**,
families, classification, phylogeny, cladistic analysis 9441.
- Julus terrestris**,
prey, urban environments, *Erianeus concolor*, Czechoslovakia, Brno 5987.
- Junctions**,
follicles, development, oogenesis, *Rhodnius prolixus* 1130.
- Jurinea mollis**,
reproduction adaptations, herbivory damage, larvae, *Lepidoptera* 9164
- Juvenile hormone**,
caste determination, activity, corpora allata, *Phlebotomus ferveida* 7477.
effects on growth, morphology, larvae, pupae, *Dicranis obliqua* 7475.
- Juvenile hormone esterase**,
biochemistry, inhibition, trifluoromethylketones, *Trichoplusia ni* 5790
Trichoplusia ni 939.
- Juvenile hormone-binding protein**,
photoaffinity labelling, *Leucophaea maderae* 8933.
- Juvenile hormones**,
accessory gland, development, secretion, females, *Schistocerca gregaria* 2672
activity, corpora allata, photoperiod effects on, *Pterostichus nigrita* 2700.
analogues, allostid, pest control, toxicity, Culicidae 7739
analogues, effects on differentiation, cell lines, *Drosophila* 7328.
analogues, molting glands sensitivity, cell death, *Oncomelanus fasciatus* 8245.
analogues, effects on development, *Insecta* 2258.
analogues, effects on fertility, emergence, *Sitotroga cerealella* 1062.
analogues, effects on genitalia morphology, *Panstrongylus megistus* 5089

Juvenile hormones, (continued)

- analogs, effects on metamorphosis, corpora allata, *Pyrrhocoris apterus* 2711.
analogs, effects on oocytes ultrastructure, *Drosophila melanogaster* 1858.
analogs, methoprene, pest control, *Lesiodermis jermone*, *Ephestia elutella* 8579.
analogs, pest control, *Tribolium castaneum* 2239.
analogs, structure-activity relationships, *Panstrongylus megistus* 5000.
analogs, toxicity, sterility, *Blattella germanica* 1829.
analogues, terpenoid lactones, effects on morphogenesis, *Lipaphis erysimi* 6641.
binding, hemolymph proteins, larvae, *Diatraea grandiosella* 207.
bioassays, morphogenesis, methodology, *Tribolium confusum* 4917.
biosynthesis, accessory gland, males, *Hyalophora cecropia* 368.
biosynthesis, corpora allata ablation effects on, *Diploptera punctata* 2580.
biosynthesis, corpora allata, *Locusta migratoria* 2590.
biosynthesis, corpora allata, starvation, neurophysiology, *Leptinotarsa decemlineata* 8106.
biosynthesis, corpora allata, vitellogenesis, *Locusta migratoria* 2714.
biosynthesis, inhibition, bisphenolcarbamate juvenoid, *Manduca sexta* 5714.
biosynthesis, precocene effects on, *Diploptera punctata* 1771.
biosynthesis, sexual maturity, ovary, *Locusta migratoria* 4278.
control, storage protein biosynthesis, fat body uptake, *Bombyx mori* 2726.
control, testes, protein biosynthesis, *Tenebrio molitor* 386.
corpora allata, oogenesis, cell cycle, *Diploptera punctata* 2710.
degradation, oxidative system, microsomes, *Musca domestica* 8958.
developmental stages, carbon dioxide effects on, *Locusta migratoria cinerascens* 3341.
developmental stages, *Leptinotarsa decemlineata* 4164.
developmental stages, measuring techniques, radioimmunoassay, *Insecta* 2587.
diapause termination, pupae, *Sarcophaga* 1477.
effects on carbohydrate composition, larvae, *Chilo suppressalis* 199.
effects on diapause, larvae, *Chilo suppressalis* 3475.
effects on, embryogenesis, *Oncopeltus fasciatus* 2703.
effects on epidermis cells differentiation, *Lepidoptera* 3519.
effects on hosts growth, *Galleria mellonella*, *Gonia cinerascens* 6764.
effects on milk biosynthesis, secretion, *Diploptera punctata* 2589.
effects on morphology, reproduction, population studies, *Eurygaster integriceps* 6648.
effects on parasitoids emergence, *Apanteles congregatus*, *Manduca sexta* 5935.
effects on pheromones biosynthesis, *Dendroctonus frontalis* 5700.
effects on protein biosynthesis, enzymatic activity, *Insecta* 3331.
effects on reproductive organs, *Danaus plexippus* 5994.
effects on reproductive organs development, larvae, *Danaus plexippus* 2713.
effects on reproductive organs growth, *Danaus plexippus* 4275.
effects on RNA biosynthesis, *Antheraea polyphemus* 3885.
effects on RNA biosynthesis, developmental stages, *Galleria mellonella* 7862.
effects on saccharides metabolism, *Pyrrhocoris apterus* 6570.
effects on sense organs, mating behavior, *Blattella germanica* 2744.
effects on spermatogenesis, diapause, *Eurygaster integriceps* 6646.
effects on vitellogenesis, oviposition, *Kaloterpes flavicollis* 4280.
enzymatic activity, diapause, *Ostrinia nubilalis* 5075.
enzyme activity, reproduction, hemolymph, *Diploptera punctata* 6657.
fat body, polyploidy, vitellogenesis, protein biosynthesis, *Locusta migratoria* 1775.
heterogeneity, binding, fat body, *Blattodea* 209.
hosts growth, host-parasite interactions, *Galleria mellonella*, *Gonia cinerascens* 2826.
hydrolysis, diapause, larvae, *Diatraea grandiosella* 4256.
identification, *Locusta migratoria migratorioides* 2584.
identification, *Terminobia domestica* 3337.
induction, cell adhesion, cell lines, *Drosophila* 8060.
larvae, development markers, *Triochoplusia* n1 2723.
metabolism, diapause, *Leptinotarsa decemlineata* 3479.
metabolism, proteins, enzymatic activity distribution *Triochoplusia* n1 206.
metamorphosis, development, polymorphism, *Insecta* 6573.
methoprene, effects on emergence, control programs, *Culex quinquefasciatus*, *Aopheles stephensi*, *Aedes aegypti* 1360.
methoprene, effects on reproduction, *Dendroctonus frontalis* 383.
mimics, effects on oogenesis, *Labiudra riparia* 1116.
mimics, farinoseal, effects on vitellogenesis, *Labiudra riparia* 1118.
molting, fat body ultrastructure, vitellogenesis, *Sarcophaga bullata* 2721.
molting, starvation, larvae, *Manduca sexta* 3500.
ovary development, brain hormones, *Aedes aegypti* 3488.
ovoviviparity, embryogenesis, molting, morphology, *Nauphoeta cinerea* 3514.
pest control, endocrinology, precocenes, *Insecta* 8442.
pest control, growth regulators, interference, endocrine system, *Insecta* 8447.
pest control, instars, *Choristoneura occidentalis* 2954.
plasma levels, development, *Locusta migratoria cinerascens* 4163.
protein biosynthesis, inhibition, compactin, *Manduca sexta* 6558.
proteins, plasma levels, queens, *Apis mellifera* 5001.
radiosays, corpora allata biosynthesis, farinoseal acid stimulation, *Diploptera punctata* 208.
radioimmunoassay, developmental stages, *Chomelia angustata* 205.
regulation, diapause, molting, *Laspeyresia bombonaria* 1119.
regulation, ovary effects on, *Aedes aegypti* 2583.
reproductive organs, accessory gland, development, *Schioteocera gregaria* 5062.
role, diapause, larvae, *Diatraea grandiosella* 3476.
role, molting, larvae, *Lepidoptera* 2691.
sensitivity, prothorax glands, *Mamestra brassicae* 3387.
sensitivity, prothorax glands, *Mamestra brassicae* 3391.
stimulation vitellogenin genes transcription, fat body, *Locusta migratoria* 6569.
synthesis, activity, *Musca domestica*, *Culex pipiens* 2581.
synthesis, corpora allata, development, *Manduca sexta* 5826.
synthesis inhibition, precocenes effects on, *Ageratum houstonianum* 3342.
vitellogenesis, polyribosomes, protein biosynthesis induction, *Locusta migratoria* 190.
workers, seasonal variations, polyphenism, *Apis mellifera* 3339.

Juveniles,

- adults, aquatic organisms, physiology, morphology, flight activity, *Insecta* 1486.
cold tolerance, survival, *Argiope aurantia* 6028.
food organisms, feeding behavior, burnt ground, heaths, *Pyrrhocoris pyrrhocoris*, *Hepialus* 6827.
fly, *Oncophorus kisutch*, food organisms, immature stages, *Chironomidae* 2131.
infestation, parasites, *Phlebotomus erythrorhynchus*, *Phlebotomus peralis* 9148.
males, photoperiod, effects on, fertility, *Anagasta kuehniella* 1880.
molting, activity patterns, stereotyped behavior, *Rhodnius prolixus* 4340.
morphology, *Euplexia iorhoa* 8875.

Juvenoids,

- effects on embryogenesis, *Earias fabia* 5828.
effects on oxygen consumption, metabolism, *Heliothis armigera* 7329.

Kaempferol,

- mutagenicity testing, lethality, *Drosophila melanogaster* 5475.

Kala kowail,

- new records, geographical distribution, Africa 33.

Kaila lamton,

- new species, 6 new species, Africa 33.

Kairomones,

- biological control, host searching behavior, hosts, eggs, *Trichogramma pretiosum* 3357.
effects on host searching behavior, *Trichogramma pretiosum*, *Heliothis zea* 423.
effects on parasites oviposition, *Tetrastichus schoenobii*, *Trypoxyna inermis* 1218.
eggs, *Adoxophyes*, host searching behavior, oviposition, *Ascogaster reticulatus* 7485.
exploratory behavior, parasites, silk, exposure time, diurnal variations, *Apanteles melanoscelus*, *Lymantria dispar* 1219.
host plants, effects on parasitoids, *Microplitis croceipes*, *Heliothis zea* 2824.
host searching behavior optimization, parasitoids, *Asobara tabida*, *Drosophila melanogaster* 7539.
host selection, colonization, reviews, *Scolytidae* 6684.
host selection, parasitoids, recognition, eggs, *Heliothis virescens*, *Telenomus heliochilus* 5186.
host-searching behavior, *Chelonus curvicaudatus* 5944.
hosts, effects on parasites oviposition, *Nemeritis canescens*, *Ephestia kuehniella* 4384.
hosts, effects on parasitoids oviposition, *Cardiochiles nigriceps*, *Heliothis virescens* 5176.
prey, effects on predatory behavior, *Amblyseius fallacis*, *Phytoseiulus macropilis* 2156.

Kallitambinia australis,

- adults, larvae, eggs, morphology, keys 866.

Kaloterpes approximatus,

- population genetics, sex chromosomes translocations, hybridization 3892.

Kaloterpes flavicollis,

- juvenile hormones, effects on vitellogenesis, oviposition 4280.
neurosecretion, distribution, brain 123.

Kaltenbachella,

- morphology, keys, distribution 7197.

Kamimura limi,

- morphology, taxonomy, Nepal 3231.

Karni virus,

- pathogen, disease transmission, sheep, *Rhipicephalus evertsi* 4512.

Karanj oil,

- chemical, control, parasites, *Capra*, *Sarcoptes scabiei* 8407.

Karyotypes,

- antennae morphology, taxonomy, *Orthocladus bipunctellus* 6411.
Chironomidae, USSR 9405.
chromosome number, sex determination, 6 species, *Bembidion* 4682.
chromosomes, *Anthonomus grandis grandis* 9080.
chromosomes, *Carabodea*, Spain 3890.
chromosomes, *Cinrocipada torrida*, *Dendrolinus hyrtaca*, *Taragama siva*, India 5468.
chromosomes, *Diplatyris gladiolae*, *Diplatyris rufescens*, India 7035.
chromosomes, *Labiudrae* 9407.
chromosomes morphology, variation, *Aeshna subarctica elisabethae*, *Somatochlora alpestris*, Switzerland 1521.
chromosomes, *Polistes* 3078.
chromosomes, role, taxonomy, classification, *Insecta* 3976.
chromosomes, *Tinocallodes montanus*, India 7842.
evolution, phylogeny, *Decticus albifrons*, *Metopopora brachyptera*, Atlanticus pachymerus 1567.
feeding, *Bezzia nobilis*, *Culicoides nubeculosus*, *Culicoides rietzi* 9411.
heterochromatin characterization, taxonomy, *Eumigus* 3092.
heterozygosity, population genetics, *Chironomus annularius* 8656.
Leptothorax provancheri 2285.
meiosis, chromosomes, *Satchelliella nubilis* 3896.
meiosis, *Histiella* 3899.
meiosis, *Heteropoda pygmaea* 8622.
meiosis, males, *Berdenella*, *Satchelliella opaca*, *Tonnoriella pulchra* 2329.
meiosis, sex chromosomes, *Nitaparvata lugens* 7845.
phylogeny, *Orthocladinae* 2407.
phylogeny, taxonomy, *Orthocladinae* 2408.
polytene chromosomes, *Metopopora amphora*, *Metopopora variabilis* 5467.
polytene chromosomes, salivary gland, *Anopheles* 9408.
population genetics, *Glyptotendipes baripes*, USSR 4695.
population genetics, simulations, *Tetranychus urticae* 1549.
salivary gland chromosomes, *Melanogromyza obtusa*, India 5466.
sex chromosomes, *Lycosa multioosa*, *Lycosa thorelli* 1514.
sex chromosomes, meiosis, *Antheraea compta*, *Antheraea assamensis* 3897.
systematics, classification systems, *Pentatomidae* 7977.
taxonomy, *Eusimulium* 2409.
taxonomy, *Helophorus aquaticus*, *Helophorus aequalis* 6259.
taxonomy, *Tetranychidae* 3086.

Keiferia lycopersicella,

- chemical control, insecticides 3755.
oviposition stimulants, host plants, *Lycopersicon esculentum* 4402.

Kenya,

- abundance estimation, catching methods, *Glossina pallidipes* 2479.
activity patterns, diurnal variations, allopatric populations, geographical variations, temperature, *Glossina pallidipes* 7525.
allopatric populations, energy metabolism, fat reserves, feeding, population structure, *Glossina pallidipes* 6866.
breeding, life cycle, visceral leishmaniasis vectors, *Phlebotomus martini* 8286.
case reports, infestation, *Cordylobia anthropophaga* 4515.
collections, identification, taxonomy, *Insecta* 3175.
cuticle lesions, abdomen, *Glossina* 4119.
disease control, vectors, *Oncocerca volvulus*, *Simulium neavei* 1327.
disease transmission, African trypanosomiasis, environmental factors, *Glossina* 1347.
disease transmission, leishmaniasis, *Phlebotomus* 1335.

Kenya, (continued)

ecological distribution, Trypanosoma infection, Glossina longipennis 3676.
feeding behavior, colonies, semi-arid environments, Macrotermes michaelseni 2004.
morphology, taxonomy, Pselaphidae 1605.
new species, taxonomy, morphology, Atrophosia aelleni 7246.
new species, taxonomy, morphology, Gabonia gabriela 3987.
new species, taxonomy, morphology, Pseudoscorpiones 4768.
parasites infection, rural environments, Trypanosoma, Glossina pallidipes 1318.
population dynamics, environmental conditions, Sorghum arundinaceum host plants, Albategna seccata 4432.
population genetics, enzyme polymorphism, Glossina pallidipes 6286.
rearing, population dynamics, survival, development, Spodoptera exempta 1310.
rearing, population stability, source effects on, Glossina pallidipes 574.
salinity effects, population dynamics, larvae development, Anopheles merus 3616.
salivary gland hypertrophy, infection, Glossina pallidipes 8141.
species composition, taxonomy, Lepidoptera 7907.
surveys, attraction, host plants, Heliotropium, Artocarpus, Ctenuchidae, Donaxae 5962.
sympatric populations, ecological distribution, population genetics, Aedes 2868.
vectors, O'nyong-nyong virus, isolation, Anopheles funestus 1466.

Kermes iselinii

new species, morphology, larvae 1638

Kermes prinus

new species, morphology, larvae 1638

Kermesic acid

antitumorones, synthesis, Coccidae 4154.

Keroplastidae

taxonomy, morphology, fossils, France 1623.

Keselmyia chandleri

new genera, new species, Czechoslovakia 4003

Keys

Acanthoscelides suaveolens, Argentina 3186.
Amphipsylla quadratidigitata, host preferences 783.
Asilidae, India 4001.
Ectoninae, Mexico 9500.
geographical distribution, morphology, Caledonia 810.
geographical distribution, morphology, Ectobius sylvestris, USA, New York 2472.
geographical distribution, Oxytelus 2371.
geographical distribution, taxonomic revision, Sharphophora 1653.
host plants, geographical distribution, reviews, Uroleucon 6808.
identification, adults, instars, Jalyus spinosus, Jalyus wickhami 3947.
identification, Alloscopus 3988.
identification, Apodisidae, Africa 2395.
identification, Atractomorphus, China, People's Rep. 2475.
identification, Ennominae, Canada 5654.
identification, Eostegana, Philippines. Papua New Guinea 3989.
identification, Haemaphysalis cooley, South Africa 3259.
identification, Holcostethus, North America 4941.
identification, Lisonotus, North America 6379.
identification, Meranoplus, Dicrosopus, Calyptomyrmex 1652.
identification, morphology, Anopheles, Thailand 6479.
identification, morphology, Diptera, British Isles 3258.
identification, morphology, Ectoninae, Mexico 6325.
identification, morphology, Hyphidrus 4816.
identification, morphology, Medetara ruficornis, Hercostomus quadifiliatus 6499.
identification, morphology, nymphs, Cicadellidae, Europe 4935.
identification, morphology, Odonata, New Zealand 6503.
identification, morphology, Oedaeus 1670.
identification, morphology, Pephysena 4857.
identification, morphology, Rhyacophilidae, Canada 6462.
identification, morphology, species, Scenopinus, Metatrachia, Stenopitirale, Israel 5650.
identification, morphology, Spodini, Nepal 808.
identification, morphology, 8 species, Paraes, Oriental Region 6410.
identification, new genera, Xestodion, Neotropical Region 4776.
identification, Oligella, Sweden 3977.
identification, Paraboloponinae 1640.
identification, Paraleucopsis, Mexico, California Gulf 2425.
identification, Pentatomidae, North America 5809.
identification, Platysyllus, Panama, Porto Bello 4848.
identification, Pomplilus 834.
identification, Pristiphora compressa, Pristiphora pallida, Pristiphora wesmali, British Isles 5646.
identification, records, geographical distribution, Australia 1582.
identification, Schoengastia, larvae, Papua New Guinea 4763.
identification, Sharphophora, Czechoslovakia 4875.
identification, species, Dicrocentrus, Nepal, India 6387.
identification, species, Mynymischa, Pseudologypha 6441.
identification, species, Tyrellia 2495.
identification, taxonomic revision, Aedes scutellaris, Tonga 6406.
identification, taxonomic revision, Exalcidion 4780.
identification, taxonomic revision, Neosilba 4702.
identification, taxonomic revision, Trichosomydus, Brazil 4778.
identification, taxonomy, Dytiscidae, Brazil 809.
identification, taxonomy, revision, Archiposcus ghesquieri, Africa 848.
identification, taxonomy, revision, Janomima danneli, Africa 840.
identification, Trichogramma, USA, Hawaii 4021.
identification, workers, morphology, Formica rufa, Sweden 4106.
identification, 3 species, Acanthoscelidae, Hungary 3932.
larvae, morphology, Kermes iselinii, Kermes prinus 1638.
larvae, morphology, Pagastia 8038.
males, Alienates 2433.
morphology, Acanthininae, British Isles 4946.
morphology, Acanthodoryctes 8057.
morphology, Anthomyiidae, Australia 5574.
morphology, Batracomorphus, Ethiopia 4865.
morphology, Buprestidae 7955.
morphology, Canadica, Israel 4834.
morphology, Ceratids 5649.
morphology, Ceratopidae 6341.
morphology, Chatophorus 8815.
morphology, Chalcidoidea, Africa 1649.
morphology, Cincidela 4804.
morphology, collections, Coleoptera, Australia 4945.
morphology, coloration, larvae, Hydropsyche 7266.

Keys, (continued)

morphology, Culicidae, Cuba 8887.
morphology, Culex, Panama 3205.
morphology, Dendrophilinae 8753.
morphology, developmental stages, females, Saissetia coffae 1705.
morphology, developmental stages, Protupulvinaria pyramiformis 4097.
morphology, Diachlorus, South America 7970.
morphology, distribution, Kaltenbachella 7197.
morphology, Enciscopus antefurcalis, Africa 3219.
morphology, Eremotylus, Simphorion 4026.
morphology, Eumidea 6340.
morphology, Forcipomyia 8796.
morphology, geographical distribution, Ciononurus 1597.
morphology, geographical distribution, Listerophoridae 2384.
morphology, geographical distribution, Nycteriboscinae, Philippines 871.
morphology, Heterocentidae, Sweden 7090.
morphology, Hophia, North Africa 1600.
morphology, Hyalomysus, North America 5589.
morphology, Hylobondinus, Brazil 4801.
morphology, Ixodes 3974.
morphology, larvae, Agabus 8041.
morphology, larvae, Chrysomelinae, British Isles 5636.
morphology, larvae, Epicauta 5638.
morphology, larvae, Kalitambina australis 866.
morphology, larvae, Myrmelion, USA, Florida 1709.
morphology, larvae, Nicophorus, Ptomascopus morio 5637.
morphology, larvae, Stator 4932.
morphology, Leiodes, Sweden 7093.
morphology, Leptotrombidium, China, People's Rep. 3148.
morphology, Mesaphorura sylvatica 8778.
morphology, Mochlonyx 8791.
morphology, new genera, new species, Mordellistenochroa 8749.
morphology, Parandromus 7149.
morphology, Parandromus, Mediterranean Region 8782.
morphology, Pentodontini 7950.
morphology, Philotarsidae 4909.
morphology, Phratara, USSR 6482.
morphology, Pinaculus campestris, Czechoslovakia 2418.
morphology, Pulvinaria 3820.
morphology, Rhinoceros, USA 790.
morphology, Rhopalidae, North America 6332.
morphology, Rhopalosiphoninus, India 7198.
morphology, Scatopse 6409.
morphology, Senicopelma, Brachypelma, Costa Rica 6352.
morphology, Stenopogon, Micrometaria, India 7179.
morphology, Suricatae 6448.
morphology, surveys, Nycteribidae, Philippines 1579.
morphology, Symphyta, Sri Lanka 5598.
morphology, synonymy, USA 5651.
morphology, taxonomic revision, Alloclemtensia 4886.
morphology, taxonomic revision, Deinotermus 4800.
morphology, taxonomic revision, Heterosternus 4771.
morphology, taxonomic revision, Staphylinidae 5558.
morphology, taxonomic revision, Stenodynerus 8832.
morphology, taxonomy, Achryson 6362.
morphology, taxonomy, Ascalaphidae 4057.
morphology, taxonomy, Ascalaphidae, Brazil, Amazon Basin 4056.
morphology, taxonomy, Austrotestes, Australia 826.
morphology, taxonomy, Blattidae 7273.
morphology, taxonomy, Crocinea, Africa 1665.
morphology, taxonomy, Curculionidae, Rhynchophoridae, Ogasawara Is. 3979.
morphology, taxonomy, Damascara, Madagascar 3209.
morphology, taxonomy, Diplazonotus 5591.
morphology, taxonomy, Forcipomyia 8054.
morphology, taxonomy, Frenchia 3216.
morphology, taxonomy, geographical distribution, Pogonomyrmex 7217.
morphology, taxonomy, Irididae 5554.
morphology, taxonomy, Lagarus, France 8761.
morphology, taxonomy, Lasius, Asia, Himalayan Mts. 5590.
morphology, taxonomy, Microdon 2427.
morphology, taxonomy, Nothocantocera 3202.
morphology, taxonomy, Planococcus ficus, Trionymus lounsburyi 6514.
morphology, taxonomy, Psyllaphagus 4113.
morphology, taxonomy, Pteropora, Africa 1668.
morphology, taxonomy, Sepsis, Italy 3998.
morphology, taxonomy, Simulium amazonicum, Brazil 3196.
morphology, taxonomy, Trichomyiinae 5565.
morphology, taxonomy, Trioxylon 4882.
morphology, taxonomy, Urosigalphus 5594.
morphology, taxonomy, Xestoccephalus, Panama 7201.
morphology, Urosigalphus, Mexico 5599.
morphology, 15 new species, Holotrichus 7958.
morphology, 8 new species, taxonomic revision, Pseudostegana 8787.
10 new species, Epiranus, India 8816.
new species, Invreia, Invreia deceptor 3221.
parasites, 10 species, Bruecia, Spain 8047.
parasitoids, taxonomy, Aphididae 6769.
Prokelisia, USA 8813.
Saccinae, Panama 1634.
Seromyia 7964.
species composition, flight activity, Catocala, USA, South Dakota 7917.
species composition, introduced species, indigenous species, Psocoptera, Hawaii 7888.
species, Phaenognatha, Australia 2402.
taxonomic revision, Anthaxia passerini 8748.
taxonomic revision, Hylaea 4022.
taxonomic revision, morphology, Microculex 6408.
taxonomy, Anobidae, Mediterranean Region 1604.
taxonomy, Aphelinidae, Prospaltellinae 2456.
taxonomy, Australophlebotomus 3195.
taxonomy, Bombylius albicapillus 1622.
taxonomy, larvae, Hellidia 1657.
taxonomy, Leptocera, Nearctic Region 3201.
taxonomy, morphology, Acampocladius 4828.
taxonomy, morphology, Acemina 8794.
taxonomy, morphology, Anister 6366.

Keys, (continued)

- taxonomy, morphology, Aphodius, Italy 3981.
 taxonomy, morphology, Asilidae, India 7184.
 taxonomy, morphology, Baduria 4777.
 taxonomy, morphology, Banasa 6418.
 taxonomy, morphology, Brueelia 6449.
 taxonomy, morphology, Calolampyris 4903.
 taxonomy, morphology, Calypsopteron 26.
 taxonomy, morphology, Carabus 8772.
 taxonomy, morphology, Ceropcephala rufa, Ceropcephala ecopogastri 2459.
 taxonomy, morphology, Crepidarius, Madagascar 4797.
 taxonomy, morphology, Diphoph, North Africa 4836.
 taxonomy, morphology, Drininae, India 7212.
 taxonomy, morphology, Dolichovespula sylvestris 4036.
 taxonomy, morphology, Ectreposthousa, Palaearectic 811.
 taxonomy, morphology, Epicypta 4005.
 taxonomy, morphology, geographical distribution, Rhombognathus 6351.
 taxonomy, morphology, Hulechia 4784.
 taxonomy, morphology, Jenkinshelia, Asia 3200.
 taxonomy, morphology, Larinae 4773.
 taxonomy, morphology, Lecanodiaspis 6425.
 taxonomy, morphology, Leucospis, India 7216.
 taxonomy, morphology, Macrotomus 1602.
 taxonomy, morphology, Micropezidae, South America, Amazon R. Basin 4830.
 taxonomy, morphology, Monanus, India 7161.
 taxonomy, morphology, Monostera 1636.
 taxonomy, morphology, new species, Macrospinae, India 4861.
 taxonomy, morphology, nymphs, Diploperla, Diploperla duplicata, Diploperla murgani 1674.
 taxonomy, morphology, Paraclemensia 4898.
 taxonomy, morphology, Peltoperla 6438.
 taxonomy, morphology, Pompilinae, Argentina 1655.
 taxonomy, morphology, Prostolons 6368.
 taxonomy, morphology, Protura, USA, Alaska 4062.
 taxonomy, morphology, Psocidae, New Guinea 3232.
 taxonomy, morphology, Pyraustini 844.
 taxonomy, morphology, reviews, Geomysidacalifornicus 85.
 taxonomy, morphology, Rhynchaeninae, India 7172.
 taxonomy, morphology, synonymy, Tincorynus herbanus, Tincorynus rubiventris.
 Tincorynus subglaber, Tincorynus distinctus 2403.
 taxonomy, morphology, Trichocylliba 3975.
 taxonomy, morphology, Xyleborini, Hawaii 7165.
 taxonomy, new species, morphology, Rhagoletisypeta uniformis, USA, Texas 2420.
 taxonomy, Propitocytus, Mokrzecka 35.
 taxonomy, Quernaspis, Neoguernaspis 1713.
 taxonomy, Trioza 2438.
 taxonomy, Xyronotidae 4061.
- kin selection,**
 altruism, social organization, Insecta 7028.
 evolution, males, workers, social organization, Hymenoptera 3848.
 evolutionary genetics, behavioral genetics, altruism, Coleoptera 8670.
 sex ratio, social organization, Hymenoptera 3048.
- Kinetics,**
 DNA repair, Drosophila melanogaster 7030.
 enzymatic activity, bioluminescence, Peropryx 2616.
 leucine metabolism, hemolymph, Achaea janata 4988.
 malate dehydrogenase (oxaloacetate-decarboxylating), muscles, Catharsis 5689.
 methylothioadenosine nucleoside phosphorylase, Drosophila melanogaster 179.
 Photinus luciferin 4-monooxygenase (ATP-hydrolysing) immobilized enzymes, Luciola mingerlica 8934.
 RNA polymerase II, comparison mutants, Drosophila melanogaster 7045.
 spermatogenesis, Dermacentor variabilis 2725.
- Kinetoplasts,**
 heteroduplex, DNA, analysis, Cnithidia luciliae 8627.
- Kitchens,**
 houses, population structure, fecundity, Blattella germanica, USA, North Carolina 6032.
- Klebsiella pneumoniae,**
 pathogens, infection, Boophilus decoloratus 5030.
- Klemania plumosus,**
 infestation, case reports, Alopecia, Canis familiaris 7643.
- Knightonia nigroscutella,**
 new species, taxonomy, morphology, Peru 4849.
- Kobuzo multituberculata,**
 taxonomy, morphology, new species, India, West Bengal 1613.
- Kochia prostrata,**
 host plants, abundance, association, Insecta 4392.
- Koletohelea yuorum,**
 new species, South Africa, Transvaal 8796.
- Korra,**
 check lists, geographical distribution, Formicidae 3146.
 geographical distribution, check lists, Sarcophagidae 3147.
 new species, taxonomy, morphology, Sinentomon chi 6459.
 surveys, new species, Coccinellidae, Sthenos koreanus, Scymnus dorotae 785.
- Korea, Dem. People's Rep.,**
 environmental surveys, collections, Invertebrata 8679.
- Korea, Rep., Gyeong-sang-Nam-Do,**
 colonization, environmental conditions, forests, soil properties, Formica yessensis 4438.
 nests, site location, Formica yessensis, seasonal variations, 4448.
- Kriana neta,**
 new species, taxonomy, morphology, South America 7982.
- Kruia,**
 new genera, taxonomy, morphology, Africa 6356.
- Kruia chrysopelma,**
 new species, taxonomy, morphology, Africa 6356.
- Kumai,**
 synergism, malathion, Nephrotettix cincticeps 3434.
- Kuajin virus,**
 vectors, disease transmission, Culex pipiens quinquefasciatus 7632.
- Kuwait,**
 Quarantini virus, isolation, characterization, vectors, Hysalomma dromedarii 5270.
- Kynurenine 3-hydroxylase,**
 activity, mitochondria, malpighian tubules, mutants, Ephesia kuhniella 6566.
- Kynurenine 3-monooxygenase,**
 mitochondria, ovary, Ephesia kuehniella 3317.
- La Crosse virus,**
 infection, RNA role, Aedes triseriatus 7386.
- Labelling,**
 cells, gene expression, clones, development, Drosophila 757.
 food organisms, tyrosine metabolism measuring techniques, Aedes aegypti 170.
 infection, Dermacentor andersoni, Anaplasma marginale 6598.
- Labia testor,**
 new species, taxonomy, morphology 2406.
- Labidomera clivicollis,**
 photoperiod, metamorphosis, body size 5087.
- Labidostomum luteum,**
 vertical distribution, seasonal variations, annual cycles, France 7803.
- Labidostomidae viaeae,**
 geographical distribution, new species, morphology, biogeography, Corsica 4454.
- Labidura bengalensis,**
 karyotypes, evolution 9407.
- Labidura riparia,**
 abundance, activity patterns, agricultural ecosystems 2163.
 eggs, effects on, maternal behavior 3521.
 eggs, hygiene, effects on maternal behavior 1146.
 farneol effects on vitellogenesis 5079.
 food consumption, inhibition, brain centers 479.
 karyotypes, evolution 9407.
 maternal behavior, brood care, eggs, females 7489.
 oogenesis, juvenile hormones mimics effects on 1116.
 predators, biological control, crop field, Trichoplusia ni 2222.
 starvation effects on oogenesis, hormones 966.
 vitellogenesis, farneol effects on 1118.
- Labopidicola,**
 taxonomy, morphology, geographical distribution, USA, Texas 5586.
- Labopidicola cepula,**
 new species, taxonomy, morphology, USA, Texas 5586.
- Labops,**
 pesticide resistance, enzymatic activity, Piperonyl butoxide effects on 1841.
- Labops hesperus,**
 pest control, infestation, harvesting effects on population levels, Agropyron desertorum 8512.
 toxicity, insecticides, synergism, pesticide resistance 1841.
- Labops hirtus,**
 toxicity, insecticides, synergism, pesticide resistance 1841.
- Labops utahensis,**
 toxicity, insecticides, synergism, pesticide resistance 1841.
- Laboratory,**
 life cycle, biology, reproduction, Hister cononius, Hister incertus 1989.
 life history, immature stages, Acanalonia bivittata, Acanalonia conica 1984.
 rearing, Bruchomorpha oculata 1717.
 temperature simulation, diurnal variations, methodology 1684.
- Laboratory animals,**
 cages, entomofauna, Diptera, Cavia porcellus 638.
 Periplaneta americana, Blattella orientalis, Blattella germanica, books 6336.
 quality control, population genetics, heterozygosity, Choristoneura occidentalis 8658.
- Laboulbenia sciakyi,**
 parasitism, Planes elegans, new records 5990.
- Laboulbeniella,**
 parasitism, Carabidae, new records 5990.
- Lacanobia oleacea,**
 pest control, pathogens, Bacillus thuringiensis 5300.
- Laccobius,**
 taxonomic revision, geographical distribution 805.
- Laccobius areolaris,**
 nomenclature, taxonomy 4775.
- Laccobius belgicus,**
 new species, Belgium 805.
- Laccobius carripallidus,**
 nomenclature, taxonomy 4775.
- Laccobius elegans,**
 new species, China, People's Rep. 805.
- Laccobius femoralis,**
 taxonomy, taxonomic revision 805.
- Laccobius misautus,**
 morphology, taxonomy 805.
- Laccobius mulsanti,**
 new subspecies, taxonomic revision 805.
- Laccobius pecki,**
 new species, taxonomic revision 805.
- Laccobius spangleri,**
 nomenclature, taxonomy 4775.
- Laccobylaeus,**
 new genera, taxonomy, morphology, Australia 4749.
- Lachesilla dimorpha,**
 new species, taxonomy, morphology, Greece 8003.
- Lachesilla pedicularia,**
 habitat, feces, Tyto alba, Yugoslavia 4436.
- Lachnostrema consanguinea,**
 chemical control, insecticides, soil moisture effects on toxicity 5337.
- Laelius ephippiatus,**
 new records, geographical distribution, habitat, Eire 6311.
- Lactate dehydrogenase,**
 activity, ontogeny, Drosophila melanogaster 8955.
- Lactroedus mactans,**
 venom, induction, priapism, man, case reports 7395.
- Ladoga camilla,**
 population ecology, mortality, parasitism, Hymenoptera, British Isles, England 8609.
- Laelaps agilis,**
 parasites, factors affecting distribution, hosts 3585.
- Laemostenus modestus,**
 new species, Nepal 808.
- Laemostenus peloponnesiacus,**
 new species, taxonomy, morphology, Greece 4814.
- Laemostenus pseudobrunneus,**
 new species, Nepal 808.
- Laemostenus thessalicus,**
 new species, taxonomy, morphology, Greece 4814.

- Laetana**, taxonomy, morphology 5561.
- Laetiantha**, taxonomic revision, morphology, phylogeny, Africa 7168.
- Lagarotis simulator**, new records, geographical distribution, Sweden 4724.
- Lagarus**, taxonomy, morphology, keys, France 8761.
- Lagenidium giganteum**, biochemical characteristics, infection, larvae, Culicidae 7372.
- biological control, water pollution, effects on infection, *Culex quinquefasciatus* 4513.
- pathogens, salinity, effects on growth, infection, *Aedes taeniorhynchus* 6606.
- Lagopoeus gibbosus**, ectoparasites, *Pedicietes phasianellus*, Canada, Manitoba 1230.
- Lagria villosa**, sexual reproduction, oviposition, egg production, fecundity, sex ratio 6630.
- Lagynochthonius hygricus**, feeding behavior, reproduction, molting, hibernation 5251.
- Lagynodes obscuriceps**, new species, taxonomy, morphology 7214.
- Lagynodes ocellifer**, taxonomy, morphology 7214.
- Lagynodes velutinus**, taxonomy, morphology 7214.
- Lakes**, abundance, seasonal variations, Chironomidae, USA, Florida 8609.
- aquatic organisms, parasites, Insecta, India 7022.
- benthos, species composition, Chironomidae, New Zealand 7817.
- community composition, succession, developmental stages, Coleoptera, Sweden 3857.
- islands, USA, Georgia, abundance, seasonal variations, *Crangonyx gracilis*.
- Paspalum fluitans* 2293.
- predation, diets, *Polycelis nigra*, Insecta 1487.
- sediments, nitrogen, sulfur, environmental impact, burrowing organisms, Hexagenia 8601.
- Lamellinae**, new species, taxonomy, morphology, 13 species, Africa 7938.
- taxonomic revision, new genera, new species, morphology, Africa 7939.
- Laminaria pallida**, association, beaches, Diptera, Coleoptera, Amphipoda 541.
- Lamoria bemi**, taxonomy, new species, morphology, India 1663.
- Lamprobrach**, V chromosome, staining methodology, *Drosophila hydei* 3894.
- Lampropholis delicata**, mortality, infestation, *Urocaenia* 2885.
- Land reclamation**, mining, nuteology, soil fauna, *Oppiella nova*, *Mixochthonius laticeps*, British Isles, England 8597.
- Land use**, effects on agriculture production, USA, Georgia 6179.
- effects on extinction, sympatric populations, *Pieris oleaceae*, *Pieris rapae*, USA 1286.
- environmental effects, population levels, *Collembola*, *Oribatei*, USSR, Kolkhida 7010.
- Landing behavior**, alarm pheromone effects on, *Myzus persicae* 7343.
- habituation, visual perception, *Drosophila melanogaster* 1156.
- orientation, phototaxis, *Scaptomyza aetulus* 1926.
- pests, host plants, *Pinus radiata*, *Ips plastographus maritimus*, USA, California 3739.
- soybean mosaic virus vectors, crop fields, *Aphididae*, *Glycine max* 3825.
- visual stimuli, retina, *Musca domestica* 7298.
- Lasiogeton**, hosts, hyperparasitism, *Lymnema orbus* 3579.
- life history, mating behavior, oviposition, development 1187.
- parasites, hosts life cycle, *Megalopyge opercularis* 2027.
- Laodelphax striatella**, disease transmission, viruses, *Oryza sativa* 1384.
- Laodelphax striatellus**, symbionts, yeasts like microorganisms 1215.
- Laphria**, distribution, morphology, activity, Nepal, Milke Danda Ridge 7615.
- Laphria assamensis**, new species, taxonomy, India 4001.
- Laphria fromerli**, new species, taxonomy, India 4001.
- Laphria indica**, new species, taxonomy, India 4001.
- Laphria keralensis**, new species, taxonomy, India 4001.
- Laphria luteopilosus**, new species, taxonomy, India 4001.
- Laphria nathani**, new species, taxonomy, India 4001.
- Laphria orientalis**, new species, taxonomy, India 4001.
- Laphriinae**, developmental stages, morphology 77.
- Laphygma exigua**, development, diapause, environmental effects, temperature, photoperiod, seasonal variations 7470.
- pest control, biological control, predators, Formicidae 5368.
- Laricobius erichsoni**, new records, geographical distribution, British Isles 5509.
- Larinae**, taxonomy, morphology, keys 4773.
- Larix laricina**, host plants, feeding behavior deterrents, *Pristiphora erichsonii* 623.
- Larus canus**, predation effects on larvae population density, *Operophtera brumata*, British Isles, Mainland 565.
- Larvae**, abundance, factors affecting abundance, colonial characteristics, *Myrmica* 2273.
- abundance, seasonal variations, Chironomus decorus, USA, New York 7014.
- abundance, seasonal variations, crop fields, *Lepidoptera*, USA, New York 6119.
- Larvae (continued)**, abundance, survival, food availability effects on, tree holes, *Aedes triseriatus* 4478.
- activity patterns, colonies, *Malacosoma americanum* 5142.
- activity patterns, movements, grasslands, *Hemileuca oliviae*, USA, New Mexico 3653.
- activity patterns, polymorphism, behavior, colonial characteristics, *Malacosoma americanum* 9359.
- adults, morphology, Tabanidae 1584.
- adults, morphology, taxonomy, keys, *Pyraustini* 844.
- aggregation, adaptiveness, effects on survival, *Pieris sinica* 1192.
- aggregation behavior, mortality, *Euphydryas phaeton* 7612.
- aggregation pheromone, dispersion pheromones effects on, intraspecific relationships, *Blattella germanica* 1161.
- air pollution effects on growth, survival, *Epilachna varietalis* 2153.
- antennae, development, *Tenebrio molitor* 9043.
- antifeedants, precocene, analogs, *Rhodnius prolixus* 8963.
- antifreeze proteins, purification, amino acid composition, *Tenebrio molitor* 8100.
- association, Anura eggs, Diptera, South America 7816.
- association, succession, fruit bodies, fungi, *Diptera* 538.
- attachment, hosts, blood meals, cattle, *Amblyomma americanum* 8339.
- auditory perception, neurons, neurophysiology, tympanum, *Locusta migratoria* 4970.
- bacteria, fungi, contaminants, *Heliothis* 735.
- behavior, *Copris lunaris* 3533.
- binding, juvenile hormones, hemolymph proteins, *Diatraea grandiosella* 207.
- bioaccumulation, mercury, food organisms, *Diptera* 2620.
- biological control, *Culex nigripalpus*, *Bacillus thuringiensis* 6601.
- biological control, pathogens, *Bacillus thuringiensis*, *Spodoptera littoralis* 1011.
- biological control, predators, *Culicidae*, *Gambusia affinis* 617.
- biological control, toxicity, *Bacillus sphaericus*, *Locusta migratoria* 4970.
- biological control, *Toxorhynchites rutilus rutilus* predators, *Aedes aegypti*, *Culex quinquefasciatus* 4579.
- biology, Pleocoma, USA, Oregon 6729.
- biometrics, host plants, *Wyeomyia vanduzeei* 2075.
- body size, morphology, *Simulium chutteri* 8880.
- body weight, parasitism effects on, *Gonia cinerascens*, *Galleria mellonella* 6766.
- Boobyx mori*, β -glucosyl-O-tyrosine, hemolymph 2562.
- brackishwater environment, *Simuliidae* 5431.
- brain cells, heterochromatin, *Drosophila nasuta* 4678.
- breeding sites, substrate specificity, *Iay*, *Stomoxys calcitrans* 9071.
- burrowing behavior, pupation, *Dytiscus verticalis* 5155.
- burrowing behavior, substrate preferences, spatial distribution, streams, *Progomphus obscurus*, *Gomphorus externus* 7023.
- carbohydrate composition, juvenile hormones effects on, *Chilo suppressalis* 199.
- catching methods, emergence traps, *Insecta* 6467.
- catching methods, *Loxos persulcatus* 7257.
- catching methods, sampling methodology, *Leptothrips mali* 4916.
- cattle parasites, sampling methodology, *Hypoderma lineatum*, *Hypoderma bovis* 1681.
- cell culture, nuclear polyhedrosis virus, enzyme-linked immunosorbent assay, proteins, *Insecta* 1091.
- cells, growth, eye disc, *Drosophila melanogaster* 3292.
- Chaoborus trivittatus*, feeding behavior, predation, zooplankton, *Daphnia pulex* 2001.
- check lists, streams, freshwater ecosystems, *Trichoptera*, Netherlands 1574.
- chemical control, control programs, *Culicidae*, Czechoslovakia 2930.
- chemical control, herbicides, malathion, *Culex pipiens* 1038.
- chemical control, insecticides, isazophos, *Adoreus tessulatus* 5405.
- chemotaxis, nucleotides, *Culex pipiens quinquefasciatus* 7334.
- chironomids, slide preparation, glycerine 1688.
- chitin biosynthesis, epidermis, *Plodia interpunctella*, *Galleria mellonella* 2516.
- choline, nervous system, *Musca domestica* 4076.
- Choristocera fumiferana*, hemolymph, lysis, *Entomophthora egressa*, *Paramecium caudatum*, *Euglena gracilis* 5026.
- chromosome number, *Lepidoptera* 2322.
- climbing, recolonization, trees, *Neodiprion sertifer*, Finland 7522.
- cocoons, silk secretion, *Gryphaena nana* 5016.
- cold tolerance, overwintering, *Cirphis unipuncta*, *Plusia gamma* 6864.
- competition, substrate preferences, dispersion, *Culex*, *USA*, Michigan, Hunt Creek 2289.
- control, postparasites, *Anopheles freeborni*, *Culex tarsalis*, hosts, *Romanomermis culicivorax* 2168.
- Cosmopterididae, Silba, predators, seeds, *Hybanthus prunifolius*, Panama 2080.
- crop fields damage, pesticide residues effects on, *Diabrotica longicornis*, *Diabrotica virgifera* 3740.
- crowding, effects on development, fecundity, *Epiphyas postvittana* 6011.
- Culex quinquefasciatus*, biological control, toxins effects on, *Chlorella ellipsoidea* 1353.
- cuticle, proteins, biochemical analysis, cross-linking, *Sarcophaga bullata* 884.
- cytogenetics, *Cochliomyia hominivorax* 2399.
- defence secretions, chemical composition, *Papilio* 2611.
- denosonucleosis virus storage, effects on infectivity, *Aedes aegypti* 8992.
- development, biochemistry, β -D-glucopyranosyl-O-L-tyrosine, *Plodia interpunctella*, *Ephestia cautella*, *Thyridopteryx ephemeraeformis* 6519.
- development, body size regulation, *Blattella germanica* 2720.
- development, body weight, diets, *Heliothis virescens*, *Diatraea saccharalis* 1750.
- development, *Chelonus insularis* parasitoids effects on, *Heliothis virescens*, *Spodoptera ornithogalli* 4379.
- development, crowding effects on, mortality, *Ootrhynchus sulcatus* 431.
- development, damage, *Abies alba*, *Eaomyia imposita*, *Eaomyia grusia*, Romania 6920.
- development, environmental effects, temperature, caste differentiation, *Polistes foederatus* 4315.
- development, enzymatic activity, alanine aminotransferase, *Drosophila nigromelanicus* 2728.
- development, enzymatic activity, genetic factors, *Drosophila melanogaster* 1541.
- development, enzyme polymorphism, dose-response effects, insecticides, *Choristocera occidentalis* 4229.
- development, grain, *Rhyzopertha dominica*, *Zea mays* 5946.
- development, granulosis virus effects on, biological control, *Pieris rapae* 2942.
- development, hormones, prothoracicotropic hormone, circadian rhythms, *Samia cynthia ricini* 3466.
- development, host plants, artificial diets, *Spodoptera frugiperda* 6169.
- development, host plants effects on, *Triticum aestivum*, *Metopopium dirhodum* 2840.

Larvae, (continued)

development markers, juvenile hormones, enzymatic activity, *Trichoplusia ni* 2723.
development, morphology, *Atherigona soccata* 358.
development, morphology, *Neuroptera* 8878.
development, mortality, benzamide effects on, *Stomoxys calcitrans* 1128.
development, overwintering, *Thanasimus dubius* 9084.
development, oviposition mistakes, host plants toxicants, *Papilio glaucus*,
 Angelica atropurpurea 8247.
development, oxygen effects on, *Drosophila melanogaster* 7453.
development, parasites, mass rearing, *Palauda*, *Galleria mellonella* 510.
development, pathogens effects on, nuclear polyhedrosis virus, *Bacillus*
 thuringiensis, *Heliothis armigera* 7377.
development, pest resistance, *Sorghum*, *Atherigona soccata* 4565.
development, population density, ecological distribution effects on, *Hemileuca*
 olivacea 604.
development, precocene I, precocene II effects on, *Locusta migratoria* 1049.
development, protein biosynthesis, salivary gland, *Drosophila melanogaster* 8111.
development, proteins, testes, *Tenebrio molitor* 3520.
development, respiratory system, *Sarcophaga bullata* 919.
development, salinity effects, *Anopheles merus*, *Kenya* 3616.
development, survival, Dufour's gland secretions, *Parischogaster mellyi* 3551.
development, survival, symbiosis, *Amylostereum areolatum*, *Sirex noctilio* 3470.
development, temperature, longevity, *Leptothrips mali* 8219.
development time, sex differences, comparison, *Heliothis zea*, *Heliothis virescens*
 1089.
development, tympanum, receptors, cells, scolopidium, *Locusta migratoria* 8218.
developmental stages, morphology, *Acanthus virens* 4098.
developmental stages, morphology, life cycle, *Colias alexandra* 6707.
diapause, geographical variations, latitude, *Aedes triseriatus*, USA, East 8222.
diapause, juvenile hormones effects on, *Chilo suppressalis* 3475.
diapause, juvenile hormones, enzymatic activity, *Ostrinia nubilalis* 5075.
diapause, juvenile hormones hydrolysis, *Diatraea grandiosella* 4256.
diapause, metabolism, excretion, chlordaneform, insecticides, *Diatraea*
 grandiosella 3333.
diapause, photoperiods effects on, *Aedes triseriatus* 348.
diapause, photoperiods effects on, *Manduca sexta* 351.
diapause, role, neuroendocrine system, metabolism, *Diatraea grandiosella* 3476.
diets, effects on, body measurements, head, *Bactra verutana* 380.
diets, food preferences, *Tipulidae*, USSR 6738.
diets, food preferences, effects on development, *Spodoptera mauritia* 5084.
digestive enzymes, enzymatic activity, *Attacus megaloma* 1762.
digestive tract fluids, enzymatic activity, *Trichoplusia ni* 1749.
digestive tract, protein biosynthesis, *Bombyx mori* 959.
disease transmission, domestic animals, *Cowdria rumenium*, *Amblyomma sparsum*
 2175.
dispersal, geographical distribution, *Danaus plexippus*, USA, Wisconsin 7566.
dispersal, host plants, capture-recapture studies, *Lymantria dispar* 6813.
dispersal, phototaxis, *Hydropsyche cockerelli*, USA, Columbia R. 5435.
dispersal, *Pulvinaria mesembryanthemi*, USA, California 2160.
distribution, population density, host plants, *Holotrichia consanguinea* 5364.
Dolichopodidae major, morphology, geographical distribution, USA, Southeast 1716.
Dolichopodidae, morphology, Germany, Fed. Rep. 3865.
ecology, morphology, *Anopheles maculipennis*, France, Lyon 1571.
effects of precocene II, molting, metamorphosis, *Rhodnius prolixus* 364.
eggs, morphology, *Euphranta connexa*, *Scambus brevicornis* 8040.
eggs, morphology, keys, *Kallitambinia australis* 866.
embryos, morphology, *Pedotenus unimaculatus* 336.
emergence, age composition, *Uroptera carveli carveli*, New Zealand, Wellington
 9085.
emergence, climbing, body size, Japan, Kiyotaki R. 3861.
emergence, sex ratio, biology, *Microdon fuscinervis* 2778.
Entomoscidea americana, growth, development, survival, diets, cultivars, *Brassica*
 campestris, *Brassica napus* 2076.
Entomoscidea americana, host plants, *Cruciferae*, 2094.
enzymes, biochemical characteristics, cleavage, *Attacus megaloma* 957.
enzymes, digestive tract, *Atherigona soccata* 4153.
factors affecting aggregation behavior, *Arge nigripennis* 464.
fat body, cells, organelles, *Protophormia terrestris* 102.
fat body infection, *Amblyopora californica*, *Culex tarsalis* 283.
feeding, *Argiope* eggs, *Megastelia argyrophegma* 7966.
feeding behavior, deterrents, host plants, *Pristiphora erichsonii* 623.
feeding behavior, diets, food conversion, growth rate, *Hyalophora cecropia* 5970.
feeding behavior effects on host plants, *Heliothis virescens*, *Gossypium hirsutum*
 721.
feeding behavior, effects on vegetation patterns, grasslands, *Hyles lineata* 543.
feeding behavior, environmental effects, *Lymantria monacha* 491.
feeding behavior, growth, *Atherigona soccata* 4563.
feeding behavior, host plants, crop fields, *Trifolium repens* 3568.
feeding behavior, host plants deterrents, *Pinus sylvestris*, *Neodipron sertifer*
 5952.
feeding behavior, host plants, *Heliothis*, *Gossypium* 6123.
feeding behavior, host plants, visual stimuli, lily, *Synanthedon pictipes* 5929.
feeding behavior, morphology, *Clanosema americanum* 5904.
feeding behavior, new species, *Dichrorampha saporidilla*, *Dichrorampha manilkara*,
 USA, Florida 1660.
feeding behavior, overwintering, *Taxodium* pests, *Diorcitra pygmaella*, USA,
 Florida 3560.
feeding behavior, pathogens effects on mortality, *Culicidae* 1382.
feeding behavior, *Peinia truncatula*, *Cylindrotopherum* 2779.
feeding behavior, predation, food sources population density effects on,
 Phytoseiulus permililis, *Amblyseius degenerans* 1205.
feeding, damage, *Nezara viridula*, *Vigna unguiculata* 2235.
feeding damage, pests, *Ostrinia nubilalis*, *Phaeotus vulgaris* 8571.
feeding, effects on yield, *Poa pratensis*, *Cyclocheilus immitatus* 3773.
feeding, food conversion, leaves, host plants, *Peris brassicae* 6746.
feeding, host plants, *Oxalis*, *Galipula pertusa* 7560.
feeding, leaves, population density, *Pseudocaulis unipuncta*, *Oryza sativa* 5949.
feeding, workers, *Bombus terrestris*, *Bombus terrestris* 749.
food organisms effects on growth, *Phthorimaea operculella*, *Solanum tuberosum* 539.
food organisms, predators, *Hypera postica* 1197.
food organisms, *Spodoptera exempta*, *Cocos nucifera* 478.
food plants, associations, cocoons, *Callisoma promethea*, USA, Michigan 2070.
food preferences, food plants, *Lepidoptera* 2845.
food preferences, *Popillia japonica* 490.
food sources competition, effects on life history, *Musca autumnalis* 1274.
functional morphology, mandibles, feeding behavior, *Cucujus clavipes*, *Dendroidea*

Larvae, (continued)

canadensis, *Pytho depressus* 4357.
fungal flora, toxicity, temperature effects, *Fusarium*, *Tenebrio molitor* 996.
gastrintestinal tract, enzymatic activity, vitamin B biosynthesis, *Phoracantha*
 sempunctata 941.
gene expression, mRNA poly(A) containing, gene expression, silk gland, larvae,
 Bombyx mori 8112.
gills, morphology, ontogeny, *Euphaedra* 6538.
Gracillariidae, isolation, plant hosts, *Quercus* 2135.
grazing, leaves, *Lepidoptera*, *Glycine* max 1257.
growth, diets effects on, rutin, *Acheta domestica* 3484.
growth, food quality effects on, *Hydropsyche* 396.
growth, host plants fatty acids effects on, *Pectinophora gossypiella*, *Heliothis*
 zea, *Heliothis virescens* 4414.
growth, host plants pest resistance, *Spodoptera frugiperda*, *Eremochola*
 ophiuroides 8539.
growth, inhibition, insecticides, *Spodoptera frugiperda* 3445.
growth, productivity, life cycle, *Ephestioperla* 7012.
growth, protandry, *Papilio polyxenes* 6725.
growth, respiratory organs, head capsules, *Aedes atropalpus* 345.
growth, survival, pest resistance, host plants, *Sitona* 6902.
habitat, feeding behavior, streams, *Phrynosoma guttifer*, Canada, Quebec 6227.
habitat, morphology, *Sympterygum madidum*, Canada, British Columbia, Ruske Creek
 6495.
habitat preferences, ecological distribution, *Culicidae*, USA, Ohio 1951.
habitat preferences, temperature, humidity, environmental effects, survival,
 molting, *Isotodidae* 1175.
habitat, tree holes, oviposition, *Hadrothrips scabripennis* 3524.
head, functional morphology, *Lyta vesicatoria* 76.
heads capsules, ultrastructure, *Chironomidae* 104.
Heliothis punctiger, mortality, nuclear polyhedrosis virus, transmission,
 predation, *Oecchia schellenbergi* 1029.
Helitula, *Helitula rogata*, taxonomy, keys, morphology 1657.
hemolymph, amino acids, *Dacnusa obliqua* 7306.
hemolymph, chemical composition, N.M.R., *Manduca sexta* 2576.
hemolymph, proteins, hemagglutination, *Lepidoptera* 4160.
herbivory, damage, reproduction adaptations, *Lepidoptera*, *Juncus mollis* 9164.
histology, baculovirus infection effects on, *Pandemus beparana* 1825.
hormones regulation, diapause, molting, *Agrypsa pomonella* 1119.
host plants antifedants, *Warburgia*, *Spodoptera exempta*, *Spodoptera littoralis*
 2842.
host plants, chemical composition, effects on population dynamics, *Aedes*
 triseriatus 6818.
host plants detection, olfaction, *Diabrotica virgiferia* 4413.
host plants, development, *Anticarsia gemmatilis* 2067.
hosts, parasites life cycle, *Phlebotomus schubergi* *neustrius*, *Malacosoma*
 neustrius 8124.
hosts, parasites, *Lyta sayi*, *Agapostemon virescens* 6759.
hosts, pathogens, *Entomophthora egressa*, *Chonostoma fumiferana* 1030.
hosts, pathogens life cycle, *Nosema carpocapsae*, *Cydia pomonella* 2633.
identification, morphology, *Ephestioperla*, North America 2498.
immobilization, hemolymph hormones, *Sarcophaga bullata* 204.
indicator species, oxygen depletion, freshwater environment, *Ephestioperla* 3852.
infection, biochemical characteristics, *Leguminosae giganteum*, *Culicidae* 7372.
infection, biological control, diets, *Brugia pahangi*, *Aedes aegypti*, 1358.
infection, midgut pH, mortality, *Bacillus thuringiensis*, *Aedes aegypti* 3423.
infection, pathogenesis, cytoplasmic polyhedrosis virus, *Insecta* 7363.
infection, pathogen, *Smittium morboanum*, *Anopheles hilli* 1807.
infestation, pest resistance, cultivars, *Lissorhoptrum oryophilus*, *Oryza sativa*
 6129.
Insecta, baculovirus, cytoplasmic polyhedrosis virus, infection, association,
 biological control 8449.
instars, biology, behavior, *Pseudophesa includens* 1973.
interspecific relationships, competition, food, growth regulators, *Aedes aegypti*
 3618.
invertebrates, morphology, *Aeshna bonariensis*, Uruguay, Parque R. 865.
Jalmenus evagoras, food plants, *Acacia ingrami*, Australia, New South Wales 2093.
juvenile hormone, effects on growth, morphology, *Dacnusa obliqua* 7475.
juvenile hormones, *Leptinotarsa decemlineata* 4164.
magnesium, food intake, effects on development, reproductive systems, *Scotia*
 segetum 7442.
malpighian tubules, histology, anatomy, *Papilio demoleus* 8930.
metabolism, anaerobiosis, *Chaoborus crystallinus* 3368.
metabolites, characterization, effects on host plants, *Cylas formicarius* 951.
metamorphosis, amino acids, lipids, *Callosobruchus chinensis* 5072.
metamorphosis, molting hormones, Precocene II, *Rhodnius prolixus* 1882.
metamorphosis, molting, juvenile hormones, enzymatic activity, *Manduca sexta*
 1500.
metamorphosis, proteins storage, fat body, *Sarcophaga peregrina* 3318.
midgut, enzyme activity, digestion, *Rhynchostira americana* 6546.
midgut, histochemistry, *Manduca sexta* 188.
midgut, potassium transport, reviews, *Lepidoptera* 8081.
molting, ecdysteroids effects on, *Bombyx mori* 2722.
molting glands, sensitivity, juvenile hormones analogues, cell death, *Oncopeltus*
 fasciatus 8245.
molting hormones, characterization, *Oncopeltus fasciatus* 2582.
molting, inhibitors, host plants, *Lepidoptera*, *Ajuga remota* 4274.
molting, mortality, food plants effects on, *Dacnusa obliqua* 7561.
molting, role, hormones, steroids, *Lepidoptera* 2691.
molting, temperature, humidity effects on, *Amblyomma americanum* 1860.
morphogenesis, growth, cuticle, *Manduca sexta* 351.
morphogenesis, isoenzymes, hemolymph, *Apis mellifera* 5827.
morphology, *Apocera hispida*, USA, California 9087.
morphology, *Baetis danicus*, Canada, Alberta 2947.
morphology, bionomics, *Neotopsyche tava*, USA, Florida 6481.
morphology, *Caurinus dectes*, USA, Oregon 7523.
morphology, coloration, keys, *Hydropsyche* 7266.
morphology comparison, 7 species, *Sisyridae* 1710.
morphology, *Corticus glaber* 6724.
morphology, development, *Brachythemis contaminata* 8280.
morphology, *Diexella nova* 8035.
morphology, *Duvallius caranti* 1711.
morphology, *Ecdyonurus macani*, Czechoslovakia 777.
morphology, *Haplophrys seneus* 6488.
morphology, *Helicobius bifidus* 4930.
morphology, *Hyponomeus umbrosaria* 5644.

Larvae, (continued)

- morphology, keys, *Agabus* 8041.
 morphology, keys, *Chrysomelinae*, British Isles 5636.
 morphology, keys, *Epicauta* 5638.
 morphology, keys, *Myrmeloon*, USA, Florida 1709.
 morphology, keys, *Microphorus*, *Ptomascopus morio* 5637.
 morphology, keys, *Stator* 4932.
 morphology, *Leucopholis burmeisteri*, *Leucopholis lepidophora* 4934.
 morphology, life cycle, *Synchlita tenealis* 7265.
 morphology, life history, *Agabus elongatus*, *Agabus wasastjernae* 4929.
 morphology, life history, *Holochroa dissocata dissocata* 7263.
 morphology, life history, host plants, *Aellopus tantalus* 7515.
 morphology, *Liponeura bezzii* 1712.
 morphology, *Midamus hecabe* 8873.
 morphology, *Nannobittacus elegans* 6490.
 morphology, nesting behavior, *Agapostemon* 7006.
 morphology, *Neopatria* 8876.
 morphology, *Oncideres gurtalata* 6487.
 morphology, *Pagasta* 8038.
 morphology, *Phalaenophana extremalis* 7264.
 morphology, *Phratra atrovirens* 6482.
 morphology, *Protodispis* varus, *Protodispis didymus* 1715.
 morphology, *Pycnopsycha flava* 5633.
 morphology, *Sagra femoralis* 6483.
 morphology, setae, taxonomy, *Ceratomya spicata* 1678.
 morphology, sexual dimorphism, *Pseudonema paenoniae* 867.
 morphology, *Sinophorus alkai*, *Charopsis aditya*, *Charops hersei* 7261.
 morphology, *Siphonurus typicus*, *Isosyncha sicca* 4846.
 morphology, *Smitta lasopis* 8031.
 morphology, *Synopacta vinella* 4925.
 morphology, *Taxonemus suskianus* 79.
 morphology, taxonomy, *Ischnura gemina* 1667.
 morphology, taxonomy, new species, *Simulium patricianae*, Guatemala 1631.
 morphology, taxonomy, phylogeny, *Polisopus herculeanus* 5556.
 morphology, taxonomy, status, *Catocala pretiosa* 7231.
 morphology, terminology, *Trombiculidae* 4101.
 morphology, *Tipula ultima* 6493.
 morphometry, age effects, *Drosophila melanogaster* 2689.
 mortality, development, predators, parasitoids, host plants chemical composition, *Dacus oleae* 7607.
 mortality factors, population dynamics, *Spodoptera exempta* 580.
 mortality, nuclear polyhedrosis virus, *Spodoptera exempta* 268.
 mortality, oviducts, methionine, *Heliothis punigeri*, *Heliothis armiger* 5380.
 mortality, pathogenicity, *Vairimorpha neatrix*, *Ostrinia nubilalis* 8168.
 mortality, pathogens, *Bacillus thuringiensis*, *Culicidae* 630.
 mortality, pathology, granulosus virus, *Cydia nigricana*, *Cydia pomonella* 272.
 mortality, pathology, granulosus virus, *Pieris brassicae*, *Pieris rapae* 270.
 mortality, pathology, nuclear polyhedrosis virus, *Spodoptera exempta* 271.
 mortality, pathology, nuclear polyhedrosis virus, *Trichoplusia ni*, *Galleria mellonella* 269.
 mortality, pests, orchards, *Dacus oleae*, *Olea europaea*, Crete 7798.
 mortality, population dynamics, *Danaus plexippus*, *Danaus chrysippus* 7610.
 mortality, susceptibility, pathogens, *Choristoneura fumiferana*, *Heterorhabdus heliothidis* 9014.
 mortality, *Synanthedon salmachus*, New Zealand 4415.
 mortality, winter, temperature effects, *Ixodes ricinus*, Ireland 1126.
 movements, host plants, *Hippodamia convergens* 5957.
 mutagenicity testing, *Drosophila* 7041.
 mutants, coloration, *Lymantria dispar*, Japan, Honshu 7047.
 Neolasoptera helandii, infestation, seeds, *Helianthus annuus*, Fungi 2074.
 neurosecretion, cells, ganglia, *Sarcophaga lineatocollis* 2526.
 new species, keys, *Kermes iselini*, *Kermes prunus* 1638.
 new species, *Pezomacra ramadei*, France, Midi-Pyrenees 817.
 nuclear polyhedrosis virus effects on molting, food consumption, *Spodoptera litura* 275.
 nuclear polyhedrosis virus infection, effects on lipids, hemolymph, *Spodoptera litoralis* 3411.
 nuclei RNA, DNA hybridization analysis, *Drosophila* 6240.
 nutrient deficiencies, pyridoxine, vitamins, survival, development, *Heliothis virescens* 1744.
 nutrition, 10-hydroxydecenoic acid, sterols, *Apis mellifera* 8080.
 oöchrocerasis vectors, biological control, pathogenic bacteria, *Bacillus thuringiensis*, *Simulium ochraceum*, Guatemala 626.
 overwintering, infection, parasites, pathogens, *Laspeyresia pomonella* 9004.
 overwintering, metabolism, cold tolerance, *Eurosta solidaginis* 4254.
 overwintering, silage, *Stomoxys calcitrans* 2199.
 overwintering, soil distribution, pests, *Smicronyx fulvus*, *Helianthus annuus* 6932.
 oviposition stimulants, *Aedes togoi* 399.
 parasites, aggregation, habitat, *Dermacentor albipictus*, Canada, Alberta 9181.
 parasites, *Genistellodites hibernus*, *Allopancia vivipara* 2624.
 parasites host preferences, effects on development, *Bracon brevicornis* 509.
 parasites, infestation, man, *Amblyonema americanum* 8431.
 parasites, morphology, *Typhlocyba* linei 8029.
 parasites, nasal infection, *Cephenemyia*, *Odocoileus hemionus* 518.
 parasites, pathology, *Burenella dimorpha*, *Solenopsis geminata* 279.
 parasitism, *Cerambycidae*, *Ycaploca evansi*, South Africa 5178.
 parasitoids, species composition, *Phutella maculipes* 9139.
 pathogenicity, assays, standardization, *Bacillus thuringiensis*, *Culicidae* 8995.
 pathogenicity, fungi, *Culicidae* 7367.
 pathogenicity, nuclear polyhedrosis virus, *Orgyia leucostigma*, *Orgyia pseudotsugata* 1026.
 pathogenicity, *Pacellomyces farinosus*, *Insecta* 1001.
 pathogens, conidia discharges, *Manestria brassicae*, *Entomophthora* 3410.
 pathogens effects on growth, mortality, *Spilroplasma*, *Galleria mellonella* 2648.
 pathogens, *Erynia aquatica*, *Aedes stimulans*, USA, New York 8152.
 pathogens, *Microsporidia*, *Simuliidae* 1018.
 pathogens susceptibility, biological control, disease transmission, *Anopheles stephensi* 654.
 pathogens, *Tolypocladium cylindrosporum*, *Aedes australis* 4211.
 Percallia ricini, body weight, viruses, pathology, granulosus virus 1805.
 pest control, antifeedants, efficiency, *Diancisia obliqua* 1462.
 pest control, cattle, ivermectin, *Musca autumnalis* 2173.
 pest control, cattle, *Musca autumnalis*, *Musca domestica* 2176.
 pest control, chemical control, insecticides, *Malacosoma indica*, India 1449.
 pest control, chemical control, vegetables, *Lepidoptera* 3744.
 pest control, pesticide applications, equipment, aquatic environment, *Culicidae*

Larvae, (continued)

8848.
 pesticide resistance, enzymatic activity, pyrethroid esterase, *Chrysopa carnea* 1839.
 pesticide resistance, genetic factors, *Lucilia cuprina* 3132.
 pests, apiculture, colonies damage, *Apis mellifera*, *Vitula edmandsae* 1419.
 pests, biological control, *Cochliomyia hominivorax* 3007.
 pests, host plants damage, *Heliothis virescens*, *Heliothis zea*, *Nicotiana tabacum* 8536.
 pests, stored products repellents effects on, *Insecta* 711.
 phase variations, survival, seasonal variations, *Spodoptera exempta* 577.
 phenotypes, polymorphism, *Arctipachya grandis*, USA, Montana, Flathead R. Basin 1714.
 Philosanria ricine, pathology, Viruses, nuclear polyhedrosis virus, *Mythimna separata* 1813.
 phosphine resistance, chemical control, *Tribolium castaneum* 1046.
 phototaxis, *Hydropsyche cockerelli* 8606.
 pigmentation, color, environmental factors, *Ephestia kuehniella* 7350.
 polymorphism, castes, *Macrotermes michaelseni* 1708.
 polymorphism, morphology, *Catocala blandula* 8033.
 polymorphism, pigmentation, *Choristoneura fumiferana* 5643.
 polyplods, ovary development, histology, *Bombyx mori* 1087.
 pupal puffing, temperature effects, *Chironomus plumosus* 761.
 population density, chemical control, aminocarb, *Choristoneura fumiferana*, Canada, Quebec 1447.
 population density, effects on pupation, *Tribolium freemanni* 7469.
 population density, paddy fields damage, *Tryporyza incertus* 3001.
 population density, predation, *Oprophera brumata*, British Isles, Mainland 565.
 population density, sampling methodology, crop fields, *Anticarsia gemmatilis* 6114.
 population density, survival, wells, *Anopheles stephensi* 616.
 predation, biological control, *Mesocyclops leuckarti pilosa*, *Aedes aegypti*, *Aedes polynesiensis* 4503.
 predation, eggs, ponds, *Ambystoma maculatum*, *Chironomidae*, Canada, Quebec 1203.
 predation, *Epicauta atrata*, eggs, *Epicauta pestifera*, *Epicauta vittata*, *Epicauta immaculata*, *Epicauta occidentalis* 9125.
 predation, pits construction, light intensity, soil moisture, *Myrmeloon immaculatus* 5126.
 predators, species composition, *Diaprepes abbreviatus* 4433.
 predators, surveys, *Heliothis virescens* 2108.
 production, ecological distribution, *Aedes*, Canada, Quebec, La Grande R. 567.
 production, mating age, effects on, *Glossina pallidipes* 7423.
 production, seining feeding, *Brachytenus spinus*, USA, North Carolina 1484.
 pupation, bogs, *Chaoborus*, USA, Michigan 7015.
 pupation, feeding, starvation, 20-hydroxy-ecdysone effects on, *Calliphora vicina* 7455.
 γ radiation, effects on development, *Dacus dorsalis* 7448.
 Ravinia lyernimieri, life history, predator-prey interactions, *Musca autumnalis*, mortality, feces 1314.
 Ravinia lyernimieri, predator-prey interactions, *Musca autumnalis* 1314.
 rearing, artificial diets, *Wyeomyia smitii* 5625.
 rearing, diets, casein, cholesterol, glucose, growth index, *Corycia cephalonica* 7467.
 rearing, diets, *Heliothis armiger* 6475.
 rearing methodology, automation, *Dacus cucurbitae*, *Dacus dorsalis*, *Ceratitis capitata* 8020.
 rearing, mortality, *Citheronia regalis* 7620.
 removal, workers, disease resistance, brood disease, *Apis mellifera* 8589.
 respiratory organs, morphology, *Macropoda mutica*, *Elmis aene* 6537.
 salivary gland, protein biosynthesis, gene expression, *Chironomus thummi* 3880.
 salivary gland, proteins, biochemical characteristics, *Chironomus tentans* 6551.
 salivary gland, secretion, *sgs-4*, X chromosome, *Drosophila melanogaster* 7455.
 sampling methods, *Sphenophorus parvulus* 8867.
 sampling, rearing, methodology, *Micropterus*, British Isles, England 4919.
 sampling, traps, *Agrotis ipsilon* 8028.
 sense organs, morphology, role, host plants orientation, chemotaxis, *Hylemna antiqua* 913.
 sensitivity, pesticides (organophosphorus), abate, fenitrothion, malathion, *Culex pipiens*, *Culex hortensis*, *Theobaldia longearcolata* 8192.
 serum proteins, *Diptera* 2564.
 sex differences, segregation, habitat selection, parasitism, *Thyridopteryx ephemeraformis* 4444.
 spatial distribution, *Basidiomyces cultivation*, *Lycoriella agarici*, Australia, New South Wales 2966.
 species richness, herbivores, seasonal variations, *Macrolepidoptera*, Finland 4327.
 7 species, *Sisyridae* 1710.
 sterilization, chemical control, pest control, crop protection, *Lepidoptera* 3709.
 substrate preferences, ecological distribution, *Chironomidae*, Yugoslavia, Pek R. 566.
 summer diapause, photoperiods effects on, *Antheraea yamanai* 3472.
 survival, agricultural practices effects on, pest control, *Agrotis ipsilon* 611.
 survival, breeding sites effects on, *Culex pipiens* 618.
 survival, crop fields, infestation, *Diatraea grandiosella* 3737.
 survival, development, culture effects on, *Ostrinia nubilalis* 3485.
 survival, development, soil properties effects on, *Papillia japonica* 1864.
 survival, diets, *Diaprepes abbreviatus* 5147.
 survival, environmental effects, *Epilachna varivestis* 6005.
 survival, food plants, oviposition, *Anthocharis cardamines*, *Alliaria petiolata* 5954.
 survival, host plants, *Asclepias humistrata*, *Danaus plexippus* 5958.
 survival, host plants cardenolide effects on, *Asclepias humistrata*, *Danaus plexippus*, USA, Florida 9154.
 survival, host plants chemical composition effects on, *Pieris rapae*, *Paropsis atomaria* 7567.
 survival, mortality factors, colonies size, *Neodiprion sertifer* 1270.
 survival, nesting behavior, *Onitis belial*, *Onitis* on 6661.
 survival, oviposition habitat preferences effects on, *Drosophila nigrospiracula*, *Drosophila mettleri* 406.
 survival, oviposition, host plants, *Papilio glaucus canadensis* 3595.
 survival, oviposition site preferences, *Choristoneura fumiferana* 5849.
 survival, pest resistance, comparison, *Solanum berthaultii*, *Solanum tuberosum*, *Lepidoptera decemlineata* 8548.
 susceptibility, nuclear polyhedrosis virus, *Agrotis ipsilon* 3402.
 taste perception, chemoreceptors, *Drosophila* 4141.

- Larvae, (continued)**
 taxonomy, morphology. *Epicauta floydwerneri*, *Epicauta caustica*, new species.
Epicauta brasiliensis, *Epicauta crucera* 2496.
 temperature effects, development, diets. *Dacus oleae* 372.
 temperature effects, duration. *Simulium nigritarsis*, *Simulium adersi* 1483.
 temperature effects on survival. *Patasson lamerei* 9055.
 thorax, morphology, exoskeleton, muscles. *Manduca sexta* 8064.
 toxicity, accephate, methamidophos, *Insecta* 315.
 toxicity, antifendones, quassinoids, *Locusta migratoria migratoriosus* 2660.
 toxicity, carbon dioxide, fumigation. *Anastrepha suspensa* 1845.
 toxicity, hydrogen peroxide. *Aedes aegypti* 303.
 toxicity, insecticides. *Spodoptera littoralis* 6615.
 toxicity, pest control. *Bacillus thuringiensis*, *Culicidae* 9012.
 toxicity testing, insecticides, soil bioassays. *Diabrotica undecimpunctata* 4220.
 toxicity tests, dimilin. *Apis* 7406.
 tyrosine-o-phosphate phosphatase, purification, characterization, *Drosophila melanogaster* 8085.
 vectors, *Oncocercera tarsicola*, *Diptera* 662.
 vertical migrations, phototaxis, *Chaoborus* 3619.
 viruses, pathology, *Amyelois transitella* 267.
 wing discs, cells, morphology, development, *Drosophila* 7429.
 wing discs, distribution, *Drosophila* 339.
 winter survival, *Anticarsia gemmatilis*, USA, Mississippi 1273.
 zoophthora incidence, measuring techniques, *Hypera postica* 8010.
- Larval**
 hemolymph, midgut, extracts, cardiotoxins, *Mollusca*, *Phoronis* 9018.
 morphology, life history, *Lybius angustus*, Sweden 3986.
- Larvicides**
 insecticides, toxicity, neem oil, plant extracts, *Azadirachta indica*, *Culex fatigans* 7396.
 pathogenicity, temperature effects, *Bacillus sphaericus*, *Culex fatigans*.
Anopheles subtypicus 2638.
 toxicity, polycytenes, *Aedes aegypti* 317.
 toxicity, *Simulium* 9016.
 zanthene, effects on, *Musca domestica* 1041.
- Larviposition**
 honeydew, secretions, environmental factors, *Aphis craccivora* 7357.
 host-parasite interactions, chemical stimuli, *Lixophaga diatraeae*, *Diatraea saccharalis* 5941.
 neurophysiology, hormones, *Glossina fuscipes* 3496.
- Lasiacanthus lissavoorlii**
 new species, morphology, Africa 1633.
- Lasioglossum**
 biochemical analysis, Dufour's gland, secretion, volatiles, cells 244.
 Dufour's gland, secretion, chemical analysis 988.
- Lasioglossum zephyrum**
 colonial characteristics, castes, social behavior 6216.
 colonial characteristics, castes, social behavior 7003.
 colonial characteristics, workers mating behavior, queens effects on 2268.
 colonies, rearing methodology 4923.
 mass rearing methodology, laboratorians 8862.
 odors, olfactory stimuli, habituation, nestmates, males 9075.
 odor discrimination, odors, recognition, nest mates 3359.
 social organization, colonial characteristics 5421.
- Lasiocleus**
 natural enemies, *Neochetina bruchi*, *Neochetina eichhorniae*, Argentina 8379.
- Lasius**
 taxonomy, morphology, keys, Asia, Himalayan Mts. 5590.
- Lasius alienus**
 taxonomy, morphology, hybrids 3217.
- Lasius draco**
 new species, taxonomy, morphology, Asia, Himalayan Mts. 5590.
- Lasius flavus**
 ant hills size, historical ecology, grasslands 569.
 coastal environment, dunes, environmental effects, brackish water, survival 4455.
 geographical distribution, check lists, Korea 3146.
- Lasius mikir**
 new species, taxonomy, morphology, Asia, Himalayan Mts. 5590.
- Lasius niger**
 coastal environment, dunes, environmental effects, brackish water, survival 4455.
 taxonomy, morphology, hybrids 3217.
 workers, population levels, marking methodology, europium 6981.
- Lasius sakagami**
 colonial characteristics, reproduction, castes 7000.
 mating behavior, colonial characteristics, population genetics 2276.
- Lasiyresia pomonella**
 chemical control, insecticides degradation, ashes effects on, USA, Washington 3785.
 damage, *Malus pumila*, plant protection, biological control, granulosus virus 8440.
 embryogenesis, phenology, eclosion 8215.
 granulosus virus, infectivity, pest control, *Rhyacionia frustana* 9332.
 insecticides, diflubenzuron, factors affecting, toxicity 4225.
 larvae, cell culture, nuclear polyhedrosis virus, proteins, enzyme-linked immunosorbent assay 1091.
 larvae, juvenile hormones, diapause, molting 1119.
 larvae, overwintering, infection, overwintering, parasites 9004.
 pest control, diflubenzuron, efficacy 8562.
 pests, host plants susceptibility, cultivars, *Malus pumila* 5313.
 spermatogenesis, ecdysone effects on, diapause 5831.
- Lateral neurosecretory cells**
 peritachal glands, morphology, histology, *Argas arboreus* 8069.
- Laigraia**
 new genera, taxonomy, Mexico 4863.
- Laigraia orizabaensis**
 new species, new genera, taxonomy, morphology, Mexico 4863.
- Latrinimerus prolongatum**
 new records, geographical distribution, Switzerland 7099.
- Lathromeris ovidae**
 parasites, suitability tests, *Chilo auriculis* 1217.
- Lathyrus odoratus**
 pea enation mosaic virus, disease transmission, *Acyrtosiphon pisum* 8488.
- Laticauda**
 hosts, parasites, *Iguanacarus* 9.
- Laticauda colubrinae**
 hosts, parasites, *Iguanacarus alexandri* 9.
- Laticauda laticaudata**
 hosts, parasites, *Iguanacarus alexandri* 9.
- Laticauda**
 new genera, *Cleridini*, Australia 3210.
- Lathroax**
 species composition, USSR, Siberia 7106.
- Lathroax thaleri**
 new species, taxonomy, morphology, USSR, Siberia 7106.
- Latitude**
 geographical distribution, species richness, *Ichneumonidae* 1966.
 geographical variations, diapause, larvae, *Aedes triseriatus*, USA, East 8222.
- Latrobiella**
 new genera, taxonomy 4909.
- Latrodectus**
 bites, venom, treatment 1319.
 sexual dimorphism, sex differences, Australia, Queensland, North 2140.
- Latrodectus hesperus**
 cuticle, ultrastructure, lipid composition 3273.
 interspecific relationships, anti-predator behavior, foraging behavior, *Pagonyx rufus* 6731.
 venom, effects on hippocampus electrical properties, guinea-pigs 8184.
- Latrodectus mactans**
 treatment, bites, stings 627.
 venom, toxicity, neurons, mechanoreceptors, neuromuscular junctions, *Crustacea* 9017.
- Latrodectus mactans tredecimguttatus**
 α-latrotoxin, effects on neurotransmitters release, rats 8179.
- α-Latrotoxin**
 effects on neurotransmitters release, rats, *Latrodectus mactans tredecimguttatus* 8179.
- Latura**
 cultivars, infestation, *Macrosteles fascifrons*, pest control, aluminum mulches 2253.
- Laurus nobilis**
 host plants, pests, new records, *Bemisia hancocki*, British Isles 2977.
- Lead**
 bioaccumulation, pollution effects, *Aphodius*, *Sphaeridium*, USA, Kansas 608.
- Leaf blotch**
 life tables, *Agromyza frontella* 450.
 seasonal variations, abundance, sex ratio, *Agromyza frontella*, USA, Pennsylvania, grasses 605.
- Leaf fall**
 pests, effects on host plants, *Pyrus communis*, *Bucculatrix pyrovorella* 7745.
- Leaf litter**
 abundance, species diversity, rainfall effects on, diurnal variations, *Arthropoda* 2881.
 community composition, seasonal variations, environmental factors, *Acanthia*, Brazil, Restinga de Marica 5219.
 decomposition, deserts, *Trypetidae*, bacteria, fungi 2132.
 decomposition, humification, *Jonespetis splendens* 5248.
 decomposition, nutrient cycles, soil fauna, *Arthropoda*, USA, Alaska 5989.
 decomposition, savannahs, role, *Isoptera*, South Africa 9190.
 decomposition, tree holes, food sources, *Aedes triseriatus*, USA, Indiana 9377.
 ecological distribution, abundance, *Epipennia ulmicola*, Costa Rica 7578.
 food availability, tree holes, larvae abundance, *Aedes triseriatus* 4478.
 forest floor, association, *Collembola*, Mexico 2167.
 forests, abundance, environmental factors, *Cryptostigmata*, *Mesostigmata*, Australia 2881.
 forests, community composition, *Uropodidae*, Romania 6006.
 forests, distribution, *Cryptostigmata*, *Mesostigmata*, Australia 4472.
 habitat, *Proteinus longicornis*, *Sepediphus doderi*, Switzerland 7621.
 herbivores, community composition, species richness, *Insecta* 9187.
 hibernation, stands, *Ips typographus*, *Picea* 9044.
 overwintering, population density, riparian environments, ponds, *Gerris odontogaster* 9003.
 samplers, *Chilopoda* 2478.
 soil organic matter, feeding behavior, *Jonespetis splendens* 9129.
- Leaf-curl**
 association, predators, pest control, *Eriophyes*, India, West Bengal 9299.
 disease transmission, vectors, *Bemisia tabaci* 7656.
- Learning behavior**
 avoidance learning, *Drosophila melanogaster* 427.
 extinction, punishment, reinforcement, response acquisition, *Melipona quadrifasciata anthidioides* 6688.
 memory, visual stimuli, population characteristics, *Drosophila* 2764.
Paraspea vulgaris 6695.
- Leaves**
 abscission, mortality, herbivores, *Insecta* 5240.
 antifeedants, *Cochorus capsularis*, *Myllocerus discolor* 5207.
 damage, feeding, host plants, *Tetranychus urticae* 7764.
 damage, feeding, *Oligonychus punicea*, *Persea americana* 6165.
 damage, orchards, pest outbreaks, USA, Connecticut 3024.
 feeding behavior deterrents, cyanide, *Prunus persica*, *Choristoneura rosaceana* 8501.
 feeding, food conversion, host plants, *Pieris brassicae* 6746.
 feeding, population density, larvae, *Pseudaletria unipuncta*, *Oryza sativa* 5949.
 food quality, host plants, mortality, *Zanthoxylum armillatoides*, *Papilio xuthus* 7563.
 grazing, larvae, *Lepidoptera*, *Glycine* max 1257.
 host plants, feeding behavior effects on, *Eriophyes cladophyllus*, *Solanum dulcamara* 1236.
 host plants, morphology effects on feeding behavior, *Adalia bipunctata* 5959.
 host plants, phenology, effects on growth, *Hispinae* 615.
 mass rearing, methodology, *Acanthia* 2486.
 morphology, habitat selection, community composition, *Collembola* 9207.
 plant extracts, antifeedants, *Thuja plicata*, *Phytolacca* 4352.
 toxicity, *Persea americana*, *Spodoptera littoralis* 7787.
 vibrations, communication, *Cupressus salei* 3542.
 water loss, damage effects on, *Insecta*, *Glycine* max 6939.
- Lebanon**
 new species, new genera, taxonomy, morphology, *Oncosomacha beaucheti*, *Emmelotibia baculifera* 7164.
- Lecanodiaspis baculifera**
 taxonomy, morphology, keys 6425.
- Lecanodiaspis bodgsoni**
 taxonomy, morphology, keys 6425.

- Lecanodiaspis rufescens**, taxonomy, morphology, keys 6425.
- Lecanodiaspis variolosa**, taxonomy, morphology, keys 6425.
- Locustinus scabrum**, host plants, community composition, Mycetophilidae 4439.
- Lectinus**, chemoreceptors, cell aggregation, *Drosophila* 98.
occurrence, reviews, Arthropoda, Insecta 180.
- Letinia tumana**, nymphs, morphology, ecological distribution, rare species 42.
- Leg.**, bristles, morphometry, speciation, *Drosophila silvestris*, Hawaii 6294.
development, nerves, muscles, embryos, *Periplaneta americana* 8216.
epiphys, functional morphology, *Lymantria dispar* 8006.
functional morphology, Insecta 2520.
innervation, mechanoreceptors, peripheral nervous system, central nervous system, *Schistocerca gregaria* 8905.
mechanoreceptors, sensilla, spatial distribution, *Schistocerca gregaria* 910.
morphology, locomotion, Carabidae 8063.
morphology, sex linkage mutants, genetic analysis, *Aedes togoi* 7852.
motor neurons structure, muscles, *Periplaneta americana* 8906.
muscles, feedback control, *Carausius morosus* 889.
muscles, feedback control, electrophysiological recording, *Carausius morosus* 890.
muscles, motor neurons, regeneration, octopamine receptors, *Periplaneta americana* 8912.
muscles, resting tension, posture, *Periplaneta americana* 7286.
muscles, ultrastructure, *Paruroctonus mesacanthus* 119.
neurons, embryogenesis, *Locusta migratoria* 337.
neurons morphology, defective mutant, *Drosophila* 896.
regeneration, cells interaction, Insecta 4251.
sensilla, mechanoreceptors, typology, morphology, *Periplaneta americana* 4980.
tarsi, sensilla, ultrastructure, function, *Chironomus* 6535.
transplants, axons, chemoreception, *Sarcophaga bullata* 2535.
- Legendrella pauliani**, molting glands, histology 258.
- Legislation**, control, pesticides encapsulation, apiculture, USA, Massachusetts 3732.
- Lep.**, oviposition sensilla, *Tinea pellionella* 3286.
- Legumes**, cultivars, infestation, *Empoasca flavescens* 2158.
- Leguminaceae**, host plants, pests, abundance, *Plathypena scabra*, USA, Tennessee 1425.
- Leguminosae**, crop fields, community composition, abundance, Insecta 6901.
crops, damage, pest resistance, *Graphognathus leucoloma*, New Zealand, North I. 5415.
crops, pests, autecology, books, Bruchidae 8707.
food plants, host preferences, *Myzus persicae*, *Acyrtosiphon kondoi*, *Aulacorthum solani*, *Acyrtosiphon pisum* 6945.
- Leguminosae**, pest resistance, crop fields, *Graphognathus leucoloma*, New Zealand, North I. 9307.
- Leidyana**, symbiosis, occurrence, digestive tract, *Nephanthis serinopa* 6751.
- Lelebius andersoni**, new species, taxonomy, morphology, Japan, Sado I. 7154.
- Leioderus kollari**, occurrence, geographical distribution, France 9472.
- Leiodes**, new records, geographical distribution, Sweden 7093.
- Leiodes gallica**, new records, geographical distribution, Sweden 7093.
- Leiodes rufipennis**, new records, geographical distribution, Sweden 7093.
- Lesophron uniformis**, parasites, hosts, *Lygus hesperus*, instars, rearing, biology 2022.
- Lesoproctus cyaneus**, pollen transport, digestive tract 8927.
- Leis axyridis**, predators, chemical control, insecticides, Coccinellidae 1417.
- Leishmania**, disease transmission, *Phlebotomus* 2914.
- Leishmania aethiopica**, infection, pathology, midgut, *Phlebotomus pedifer* 8157.
- Leishmania doxovani**, vectors, disease transmission, *Phlebotomus*, Kenya 1335.
- Leishmaniass**, disease transmission, epidemiology, *Lutzomyia umbratilis*, Guyana 9237.
disease transmission, *Phlebotomus* 2914.
disease transmission, *Phlebotomus*, Kenya 1335.
vectors, habitat, survival, *Psychodopygus intermedius* 9223.
- Leturus quinquestratus**, venom, toxicity, rats 8193.
- Letops vittata**, feeding, flowers, pollination, Netherlands 2061.
- Letia decemputata**, indole-3-acetic acid metabolism, gut 3311.
- Letipedia kahuziana**, *Rhacomyces leleupidae* parasitism, new records 5990.
- Letmia minor**, plant extracts, oviposition deterrents, *Aedes aegypti* 5311.
- Lemon oil**, components, olfactory perception, electrophysiological recording, antennae, *Periplaneta americana* 7295.
- Lenarchus bicornis**, new records, geographical distribution, Finland 8673.
- Lens culinaris**, crops, damage, pests, evaluation, *Spodoptera praefica* 8483.
flour, effects on growth, development, *Callosobruchus maculatus* 7772.
host plants, pest resistance, *Callosobruchus chinensis* 7766.
- Lepidochrysops jamesi clausenisi**, new subspecies, taxonomy, morphology, South Africa 5602.
new subspecies, taxonomy, South Africa 8837.
- Lepidocyrtus curvicolis**, habitat selection, leaves morphology 9207.
- Lepidoglyphus destructor**, allergens, house dust, man 1371.
infestation, stored products, environmental conditions, relative humidity, Triticum 8513.
pest control, chemical control, carbon disulfide, Triticum 8515.
- Lepidophora trypoxylona**, new species, taxonomy, morphology 2414.
- Lepidoptera**, abundance, seasonal variations, larvae, crop fields, USA, New York 6119.
abundance, species composition, seasonal variations, New Caledonia 4441.
abundance, species richness, host plants effects on, Finland 9162.
abundance, surveys, British Isles, Huntingdon 2354.
allocthonous input, streams energetics 8737.
 γ -amino butyric acid effects on neurophysiology, hemolymph 4152.
auditory perception, acoustic responses evolution, predators echolocation, Chiroptera 4578.
auditory perception, tympanum, acoustic responses, echolocation, predators, Chiroptera 4975.
bibliographies, data banks 4756.
bile pigments, chemical properties, role, photosensitivity 2601.
biogeography, phylogeny, geographical distribution, photoperiod effects on 2136.
biogeography, species composition, montane environments, USA, Nevada, Spring Range 7914.
biological control, mortality, susceptibility, infection, *Vairimorpha necatrix* 2965.
biological control, natural enemies, competition, Homoptera, Coleoptera 6095.
biological control, pathology, *Bacillus thuringiensis* 997.
borers, biology, behavior, control 3628.
breeding cages, materials 5630.
caring methods, electrode-type light traps, efficiency 7254.
cell lines, cell culture, methodology 8059.
check lists, geographical distribution, Italy, Tuscany 3141.
check lists, Nigeria 7108.
check lists, species composition, Hungary, Budapest 8677.
check lists, species composition, Spain 7081.
check lists, species composition, Spain, Huesca 7079.
chromosomes, microtubules, localization 3079.
collections, museums 7129.
collections, terminology, acronyms, museums, Neotropical Region 7925.
collections, types, museums 7921.
compound eyes, visual perception, light intensity, electrophysiological recording 7300.
conferences 4049.
conservation, systematics role, classification systems 4760.
digestive tract cells, endocrine system, ultrastructure 924.
dimorphism, Trichoptera 8879.
dispersal, environmental factors 5976.
ecological distribution, species composition, bogs, Switzerland 6874.
ecology, biogeography, species composition, USA, California, Trinity Alps 7122.
endangered species, rare species, wildlife conservation 2147.
endangered species, wildlife conservation, education, British Isles 2123.
escape behavior, webs, Araneida 454.
exocrine glands, defence secretions, evolution 3388.
exotic species, morphology, USA, New Mexico 5529.
feeding behavior deterrents, extracts, *Tanacetum vulgare* 6742.
flight activity, night, surveys, USA, Colorado 2791.
flight activity, periodicity, Malaysia 7514.
flight activity, temperature effects 1943.
food organisms, predation, *Orthetrum austriacum* 4437.
food preferences, predatory behavior, *Argiope bruennichi* 5171.
geographical distribution, species composition, Austria, Tyrol 7068.
geographical distribution, zoogeography, Canada, Alberta 7916.
host-parasite interactions, *Apanteles marginiventris*, *Meteorus autographae*, *Glycine* max, USA, South Carolina 507.
hosts, parasitoids, competition, Diptera, Hymenoptera 1224.
hosts, parasitoids, competition, Hymenoptera, Diptera 1225.
immunity, antibacterial agents, gram-negative bacteria 1818.
inbreeding, effects on eggs hatchability, genetic load 7877.
iridovirus, replication, isolates, *Armadillidium* 5745.
juvenile hormones effects on cells differentiation, epidermis 3519.
kinechore, physicochemical properties, chromosomes, meiosis, irradiation 1516.
larvae, biological control, pathogens, *Nomuraea rileyi*, *Glycine* max 716.
larvae, chromosome number 2522.
larvae, fibrils, muscles, terminology 2521.
larvae, food preferences, food plants 2845.
larvae, grazing, leaves, *Glycine* max 1257.
larvae, herbivory, damage, reproduction adaptations, *Jurinea mollis* 9164.
larvae, molting inhibitors, host plants, *Ajuga reptans* 4274.
larvae, molting, role, *Homoptera* 2691.
larvae, pest control, chemical control, vegetables 3744.
males, sex pheromone, organic compounds, attractancy 2592.
mating behavior, mate selection, natural selection, pest control 4285.
morphology, bristles, frenulum, females 1720.
neuromuscular junctions, synapse, electrical properties, ultrastructure 4116.
new records, geographical distribution, Italy, Calabria 7098.
new records, species composition, British Isles, England, Yorkshire 9450.
occurrence, migrants, Eire, Cork Co. 9453.
occurrence, migrations, British Isles 9449.
occurrence, migrations, Eire 7885.
occurrence, new records, British Isles, England, Cornwall Co. 9443.
pest control, chemical control, *Apium graveolens*, USA, California 9343.
pest control, larva sterilization, chemical control, crop protection 3709.
pest control, molting inhibitors, azadirachtin 5333.
pest control, pathogens, transmission (transovarial), *Vairimorpha necatrix*, *Nosema pyrausta* 8125.
pests, prey, identification, precipitin test 1690.
pests, weather, effects on population dynamics, Brazil 6834.
population studies, mimicry, growth rate, survival 7611.
potassium transport, midgut, larvae, reviews 8081.
predator-prey interactions, Hemiptera 7586.
preservation, pinning, methodology, needles 6470.
pupae, susceptibility, parasitism, *Neocleptana carpopapsea* 287.
rare species, wildlife conservation, British Isles 2121.
records, introduced species, 4705.

Lepidoptera, (continued)

- records, taxonomy, morphology, Spain, Guadalajara 7080.
 reproductive strategy, emergence, phototaxis 5885.
 sex pheromone, synthesis 3729.
 sexual reproduction, selection, body size, males 4326.
 species composition, abundance, habitat, British Isles, England, Staffordshire 7887.
 species composition, abundance, habitat, USA, Texas, Barton Creek Canyon 7915.
 species composition, abundance, Norfolk I. 4461.
 species composition, habitat, life cycle, USA, Nevada, Clark County 5145.
 species composition, occurrence, British Isles, Scotland, Kirkcubrightshire 9447.
 species composition, occurrence, summer, Finland 7896.
 species composition, occurrence, Yugoslavia, Slovenia 9455.
 species composition, surveys, Greece Coast 6316.
 species composition, taxonomy, Kenya 7907.
 species composition, Uromycladum terreplanum galls, Acacia host plants 7557.
 specimens, cleaning methodology 63.
 spermatocytes, meiosis, nucleoproteins, chromosomes fluorescence 6262.
 surveys, abundance, British Isles, Bernwood Forest 2353.
 surveys, abundance, species composition, Greece 6319.
 surveys, ecological distribution, Spain, Huesca Province 3139.
 surveys, Hungary 7995.
 surveys, Italy, Tuscany 7097.
 surveys, new records, geographical distribution, Italy, Calabria 3144.
 taxonomy, homonymy, Brachiopoda 7991.
 ultrastructure, scents scales 7268.
 wildlife conservation, industries, Taiwan 2113.
 wildlife conservation, institutions, British Isles 2124.
 wildlife conservation, rare species, British Isles, England 2119.
 wildlife conservation, role, education, USA, California 2112.
 wildlife conservation, wildlife management, plant communities, life history, Canada, Newfoundland 2107.
- Lepidosaphes beckli,**
 association, abundance, Acarica, Egypt 6877.
 ecological distribution, habitat, agricultural land, New Caledonia 4429.
- Lepidosaphes tapleyi,**
 pests, abundance, ornamental plants, Egypt 6955.
- Lepinotus reticulatus,**
 habitat, feces, Tyto alba, Yugoslavia 4436.
- Lepidogaster crassipes,**
 autogeny, first record, Brazil 1132.
- Lepisma saccharina,**
 pests, buildings, Czechoslovakia, Prague 592.
- Lepismatidae,**
 collections, taxonomy, morphology 4065.
- Leprosidae,**
 parasites, seasonal variations, species composition, Ixodidae, Siphonaptera, Spain, Ciudad Real 8333.
- Leptopus,**
 intestinal parasites, Hircocystis lepropi 2128.
- Leptaciurus klapperichi,**
 new species, Iran 3187.
- Leptemnia,**
 nomenclature, taxonomy, synonymy, Erythemis, Mesothemis 846.
- Leptyphantes leptyphantiformis,**
 new records, geographical distribution, Belgium 9483.
- Leptidea sinapis,**
 protandry, diapause, pupae, adaptiveness 5890.
- Leptididae,**
 parasites, reviews, Leptinus, North America 9498.
- Leptinotarsa decemlineata,**
 apical tissue, histology, ovary, testis 7427.
 biological control, pathogens, production methodology, Beauveria bassiana 1404.
 body temperature, thermoregulatory behavior 5705.
 diapause, photoperiods, metabolism 3479.
 ecophysiology, adaptations, migrations 7608.
 flight muscle, malate dehydrogenase, malate dehydrogenase (decarboxylating) 3315.
 food plants, infection, potato leaf roll virus, effects on longevity, fecundity 7440.
 hemolymph, proteins, hemagglutination, larvae 4160.
 host plants, pest resistance, comparison, Solanum berthaultii, Solanum tuberosum 8548.
 infection susceptibility, pathogens, exotoxins, Bacillus thuringiensis 5734.
 juvenile hormones, developmental stages 4164.
 overwintering populations, pest control, soil, fumigation 2263.
 oviposition, site selection, host plants, Lycopersicon esculentum 2081.
 pathogens, pesticides effects on growth, Beauveria bassiana 6152.
 pest control, biological control, antiseptics, Neoplectana carpocapsae 3778.
 pest control, biological control, pathogens, Bacillus thuringiensis 1431.
 pest control, diapause, life cycle, synchronization, seasons 8446.
 pest outbreaks, British Isles 6898.
 population dynamics, oviposition, development, pest resistance, Solanum berthaultii 4407.
 predators, plants unfedants 521.
 records, occurrence, egg production, British Isles 1440.
 starvation, juvenile hormones biosynthesis, corpora allata, neurophysiology 8106.
- Leptinus,**
 parasites, hosts, range, reviews, North America 9498.
- Leptinus occidentalis,**
 parasites, hosts, range, North America 9498.
- Leptinus orientalis,**
 parasites, hosts, range, North America 9498.
- Leptobium jordanicum,**
 new species, Jordan 3187.
- Leptobium minusculum,**
 new species, Afghanistan 3187.
- Leptocera,**
 taxonomy, subgenera, keys, new species, new records, geographical distribution, larvae, morphology, Nearctic Region 3201.
- Leptocera digna,**
 new species, taxonomy, morphology, Bulgaria 8785.
- Leptocoridae,**
 drift, environmental effects, Australia, A.C.T., Condor Creek 753.
- Leptocoopa carteri,**
 gonotrophic cycles, age, host searching behavior, blood meals 8291.
- Leptocoopa torrens,**
 bites, man, USA, California 8430.
- Leptocoria acuta,**
 nymphs, infection, Penicillium oxalicum 1815.
- Leptoglossus cinctus,**
 morphology, comparison, Leptoglossus fasciatus, Suas genitalis 4938.
- Leptoglossus corculis,**
 chemical control, pest control, Pinus strobus, USA, North Carolina 2982.
 feeding, environmental impact, seeds, injuries, Pinus taeda 1238.
 nymphs, color, green, dominance 1789.
- Leptoglossus fasciatus,**
 morphology, comparison, Leptoglossus cinctus, Suas genitalis 4938.
- Leptoglossus phyllopus,**
 host plants, crop fields, Sorghum vulgare 2097.
 infestation, effects on yield, Sorghum 6164.
 pests, damage, Sorghum bicolor 8381.
 pests, effects on crop yield, Vigna unguiculata 3769.
- Leptomastix beckli,**
 pests, biological control, Aphytis lepidosaphes, Spain, Valencia 1458.
- Leptomastix gloveri,**
 pests, biological control, Aphytis lepidosaphes, Spain, Valencia 1458.
- Leptomastix dactylopi,**
 parasites, pest outbreaks biological control, Phanococcus citri 675.
- Leptomymex,**
 sympatric populations, resource utilization, activity patterns, feeding behavior 2900.
- Leptomymex fragilis,**
 resource utilization, activity patterns, feeding behavior, nests 2900.
- Leptomymex lugubris,**
 resource utilization, activity patterns, feeding behavior, nests 2900.
- Leptoneta micropthalma,**
 Semiferous tubule, ultrastructure 329.
- Leptophebiae,**
 new genera, new species, South America 5575.
- Leptophila boudardi,**
 parasitoids, diapause adaptations, geographical variations, Drosophila melanogaster 6637.
- Leptophlebia marginata,**
 growth, nymphs, Sweden, Rickland R. 3850.
- Leptophyes punctatissima,**
 embryogenesis, diapause, temperature effects on 8240.
- Leptopirina papillata,**
 new species, new genera, morphology 1598.
- Leptopylla segnis,**
 infestation, habitat, Mustela erminea, New Zealand 8332.
- Leptotha galbula,**
 diets, host plants, habitat utilization, Australia 6049.
 life history, ecological distribution, Australia 2874.
 seasonal variations: fat metabolism, body weight, dormancy, environmental effects, Australia 3327.
 sex ratio, habitat effects on, Australia 2863.
- Leptothorax,**
 diets effects on phenotypes 3373.
- Leptothorax acervorum,**
 geographical distribution, check lists, Korea 3146.
- Leptothorax muscorum,**
 workers, stridulation, sound production, morphology 1921.
- Leptothorax nylanderi,**
 colonial characteristics, social structure, queens 4648.
- Leptothorax goyazschleri,**
 social organization, sterility, fertility, queens, sexual behavior, karyotypes 2285.
- Leptothrips mali,**
 development, temperature, longevity, larvae 8219.
- Leptothrips mali,**
 development, temperature, longevity, larvae 8219.
- Leptothrips mali,**
 development, temperature, longevity, larvae 8219.
- Leptotrombidium,**
 taxonomy, morphology, check lists, China, People's Rep. 3148.
- Leptotrombidium safordi,**
 new species, Rousettus amplexicaudatus, Rallus torquatus, Philippines 794.
- Leptus,**
 parasites, attachment sites preferences 8321.
 phoresy, interspecific relationships, Bezzia bivittata 6040.
- Leptusa,**
 association, Proteus longicornis, Switzerland 7621.
- Leptyphantes armatus,**
 taxonomy, synonymy, habitat, new records, geographical distribution, Europe, Alps 7899.
- Leptyphantes baebleri,**
 taxonomy, synonymy, habitat, new records, geographical distribution, Europe, Alps 7899.
- Leptyphantes handschini,**
 taxonomy, synonymy, habitat, new records, geographical distribution, Europe, Alps 7899.
- Leptyphantes notabilis,**
 taxonomy, synonymy, habitat, new records, geographical distribution, Europe, Alps 7899.
- Leptyphantes variabilis,**
 taxonomy, synonymy, habitat, new records, geographical distribution, Europe, Alps 7899.
- Lesoderma serricornne,**
 pest control, methoprene, juvenile hormones analogs 8579.
- Lesions,**
 chromosomes, males, mating, DNA repair, females, Drosophila melanogaster 6264.
 cuticle, abdomen, Glossina, Kenya 4119.
 cuticle, abdomen, new records, Glossina 5659.
 cuticle, histopathology, Glossina pallidipes, Glossina brevipalpis, Glossina austeni 8163.
 cuticle, histopathology, infectivity, Glossina morsitans morsitans 8162.
 neurons, dendritic branching, metabolic cost of depressor motoneurons, Periplaneta americana 7292.
 neurons, effects on motor activity, Periplaneta americana 4128.
 sex chromosomes, DNA repair, deficient mutant, Drosophila 5474.
- Lesotho,**
 new species, taxonomy, morphology, Hermannomyia oldroydi 4832.

- Lesser Antilles**, geographical distribution, environmental effects, habitat, community composition, Odonata 1569
- new species**, taxonomy, morphology, *Frasesa albithorax*, *Odonella jeremie* 6386
- Lestes disjunctus disjunctus**, life cycle, diets, nymphs, Canada, Alberta 3056.
- Lestes vigilax**, mating behavior, males, sperm displacement, bursa copulatrix 8248
- Lestevasscula beeri**, new records, geographical distribution, German Dem. Rep., Potsdam, Rietzer See 471
- Lestros lica**, hosts, parasites, *Sasacarus licae*, Peru 1587.
- Lestrimelitta guyanensis**, new species, morphology, castes, French Guiana 3220.
- Lestrimelitta limao**, genetic load, sex alleles 5495
- Lethal dose**, body weight effects on, toxicity testing, insecticides, statistical analysis, *Choristoneura occidentalis* 8207
- Lethality**, alleles, mutation, loci, mus-105, mus-109, *Drosophila melanogaster* 8644, embryos, Y chromosome translocations, genetic control, *Hylemyia antiqua* 2316, genes, abortion, eggs, sex determination, males, *Megoura viciae* 6252, genes, effects on mating behavior, *Drosophila melanogaster* 5484, genes, mutation, X radiation sensitivity, *Drosophila melanogaster* 7044, genetic load, population genetics, *Drosophila willistonii*, Colombia 9429, mutagenicity testing, flavonols, *Drosophila melanogaster* 5475, mutants, purines metabolism, *Drosophila uelanoagaster* 3095, mutants, sex chromosomes, *Drosophila melanogaster* 5473, mutation, instability, alleles, X chromosome, *Drosophila melanogaster* 3107, phenotypes, notch gene, *Drosophila melanogaster* 3101
- Leucania loreyi**, sex pheromone, chemical composition 1773
- Leucania separata**, digestive enzymes, effects on pathogenicity, *Bacillus thuringiensis* 999, hormones, melanization, coloration 3360, rearing, artificial diets, development 2493, reproductive organs, morphology 4243
- Leucine**, kinetics, hemolymph, *Achoea janata* 2559, metabolism, kinetics, hemolymph, *Achoea janata* 4988
- Leucoides orbonalis**, pest control, *Bacillus thuringiensis* 1836, pest control, fertilizer applications, crop fields 7707, pest control, insecticides, *Salanum melongena* crop fields 7678, pest resistance, host plants, varieties, *Solanum melongena* 7676, pests, host plants, susceptibility, *Solanum melongena* 7710, seasonal variations, dispersion, host plants, India, Sabour 7741
- Leucodynerus**, new genera, taxonomy, morphology, North America, West 8821.
- Leucodynerus samianus**, new species, taxonomy, morphology, North America, West 8821.
- Leucoma candida**, abundance, predation effects on, *Passer montanus* 1292.
- Leucophaea maderae**, biochemical characteristics, vitellin, amino acid composition 6552, hemolymph, clotting, immunochemistry 1417, juvenile hormone binding protein, photoaffinity labeling 8933, nervous system, opioids receptors 2525, opiates receptors, binding, enkephalin analogs, mudgut 8911, toxicity, carbaryl, age effects 1846
- Leucophaea rimbicellana**, new species, India 784
- Leucopholis burmeisteri**, morphology, larvae 4934.
- Leucopholis lepidophora**, morphology, larvae 4934.
- Leucopsis argenticollis**, new records, geographical distribution, British Isles 9442.
- Leucopsis geniculata**, new records, geographical distribution, British Isles 9442.
- Leucoptera psophocarpa**, new species, taxonomy, morphology, New Guinea 4897.
- Leucopsis**, taxonomy, morphology, keys, India 7216
- Leucospis affinis**, parasites, nests association, *Osmia marginata* 1965.
- Leucospis aruina**, new records, geographical distribution, Australia 2458.
- Leucospis atriceps**, new records, geographical distribution, Australia 2458.
- Leucospis australis**, new records, geographical distribution, Australia 2458.
- Leucospis bioculata**, new records, geographical distribution, Australia 2458.
- Leucospis giraulti**, new records, geographical distribution, Australia 2458.
- Leucopsis laubmanni**, new species, taxonomy, morphology, Sri Lanka 7216.
- Leucospis morawitzii**, new records, geographical distribution, Australia 2458.
- Leucopsis ricki**, new records, geographical distribution, Australia 2458.
- Leuctra szczytkoi**, taxonomy, new species, morphology, USA, Louisiana 1675.
- Leukocytes (eosinophilic)**, translocation, histamine, parasitism, *Bos taurus*, *Boophilus microplus* 2912
- Leukocytes (granulocytic)**, temperature, hemolymph, effects on adherence, filopodium elongation, *Bombyx mori* 8073.
- Levicheffer**, synonymy, *Ocalacheffer* 5552.
- Libelloides longicornis versansis**, new subspecies, taxonomy, morphology, geographical distribution, Europe, Alps 4058.
- Libellula depressa**, flight activity, Austria, North Tyrol 7070.
- Liburniella ornata**, abundance, seasonal variations, plantations, USA, North Carolina 1313.
- Libya**, population density, traps, *Dacus oleae* 6956.
- Life cycle**, abundance, cocoons parasites, *Dipteron pini* 7541, abundance, *Haemaphysalis punctata*, *Ixodes ricinus*, British Isles, Wales 5263, abundance, infestation, *Phytomyza orobanchiae*, *Orobanchae crenata*, Egypt 6812, activity patterns, Arachnida, USA, New Mexico 1953, activity patterns, predation, *Coniolepteryx esbenpesneri* 6847, adaptations, tundra, *Tipula canifrons* 9111, aggregation, *Anguria warzewiczi* host plants, *Paryphes blandus*, Costa Rica 7553, biogeography, *Akimerus schaefferi* 9103, biology, ecology, *Phenacoccus maniboti*, South America 440, bionomics, infestation, cattle, *Ctenocephalides felis orientis*, India 8427, bionomics, *Phloeotribus liminaris* 9115, bionomics, predators, *Diadiplosis coci*, *Saxetia hemisphaerica* 9094, breeding, photoperiod effects on, *Armadillidium vulgare* 6643, breeding, visceral leishmaniasis vectors, *Phlebotomus martini*, Kenya 8286, *Choristoneura occidentalis*, *Dioryctria reniculoides*, *Zeiraphera hesperia*, *Nematocera filamentaria*, *Grisekda radicans*, *Accleris glovera*, USA, Idaho 5889, *Citheronia laocoon*, Brazil, Sao Paulo 6492, *Coenagrion resolutum*, *Lestes disjunctus disjunctus*, Canada, Alberta 3056, colonial characteristics, aggressive behavior, reproductive behavior, *Eriophora bistriata* 473, colonies, temperature effects on, *Evyaleus calceatus* 5078, crop fields damage, pest control, *Aphis fabae*, British Isles 3800, development, *Ixodes persulcatus* 9096, development, population dynamics, Mammalia, chemotaxis, hosts, Simuliidae, *Mammalia* 1190, development, stored products pests, *Callosobruchus maculatus* 5314, development time, *Corticueus glaber* 6724, diapause, feeding, streams, *Ephemera danica*, Sweden 3055, diapause, larvae, environmental conditions, *Colias alexandra* 6707, diets, pests, *Helopeltis antoni*, Sri Lanka 4532, dimorphism, photoperiod effects on, *Anaea andria* 7444, *Dysdercus boreas*, Brazil 6484, ecological distribution, diets, *Colias alexandria*, USA, Rocky Mts. 7517, ecological distribution, lps typograph, *Ips amitus*, *Pityogenes chalcographus* 6715, ecology, pests, cimex 1354, egg production, temperature effects on, *Pieris rapae* 7445, *Elkroera pudibunda*, Spain, Iberian Peninsula 5137, emergence, reproduction, pest control, *Hylemyia antiqua* 6143, environmental effects, temperature, relative humidity, development, mortality, *Coccyra cephalonica* 1127, *Ephemera danica*, British Isles, Lambourn R. 7013, *Eriocampa juglandis*, USA, Alabama 9099, *Euxoa sibirica*, Japan, Tohoku 7438, fecundity, longevity, host plants effects on, *Helina undulata* 6806, feeding behavior, larvae, *Pelina truncatula*, *Cylindropsalmus* 2779, feeding behavior, overwintering, *Taxodium pests*, *Dioryctria pygmaella*, USA, Florida 3560, feeding, effects on host plants weed control, *Notaris bimaculatus*, *Agropyron repens* 1250, feeding, fecundity, *Clemensia albata*, *Protopococcus viridis* 7509, feeding, habitat, *Necrodes*, *Necrophorus*, British Isles 5909, feeding, parasitoids, *Parasierola*, *Pectinophora gossypiella* 6771, feeding, pests, *Cardiastethus nazarensis* 6965, feeding, predators, *Aphidletes*, *Yugoslavia* 3552, flight activity, *Caualyphus sabulosa* 9114, flight activity, feeding behavior, *Ceraclea nigronervosa*, Norway 5429, flight activity, phenology, *Triptoxylon attenuatum*, *Triptoxylon figulus* 9098, flight activity, sampling methodology, *Euxoa scandens* 6094, flight activity, sensory stimuli, *Hypera postica* 8061, food plants, *Pennisetum setosum*, *Erythraxis polyxena polyxena* 8874, *Frumenta nudinella*, USA, Virginia 4329, geographical distribution, ecology, *Euchorthippus*, France 9108, geographical distribution, food plants, British Isles, *Melanargia galathea* 9091, geographical distribution, males, *Tabanidae*, France 9113, geographical distribution, *Valgus hemipterus*, USA, Michigan 1954, growth, development, *Odontocercus albicornis*, British Isles, England 4660, growth, productivity, *Ephemeroptera* 7012, habitat, ecological distribution, dunes, *Psammodes porricollis*, France Coast 5982, habitat, nesting behavior, feeding, *Osmia maritima* 6851, habitat, species composition, *Lepidoptera*, USA, Nevada, Clark County 5145, *Hister coenosus*, *Hister incertus*, laboratories 1989, host plants, *Coccophagus sanguinarum*, *Lygocoris vitticollis*, USA, Pennsylvania 5902, host plants damage, pest control, *Phigalia plumogaria*, USA, Utah 3025, host plants, *Heliothis zea*, *Heliothis virescens*, USA, Mississippi 2085, host plants, *Hypolixus nubiliosus*, *Amaranthus caudatus*, Egypt 6730, host plants, mortality, *Phyllonorycter messaniella*, Australia 3554, host plants, pest control, integrated control, *Rhacynia frustana*, USA, California 5318, host preferences, *Aulacophora foveicollis* 9106, hosts, parasites, *Megalopyge opercularis* 2027, house dust pests, *Dermatophagoides pteronyssinus* 6056, immigration, diapause, *Agrotis ipsilon*, USA, Iowa 5900, infection, *Tuzetia debaisieuxi*, *Simulium vittatum* 3405, infestation, epidemiology, man, *Pediculidae* 2916, larvae morphology, *Synclita tenealis* 7265, life history, *Empoasca dolichi*, Nigeria 2772, life history, *Haemaphysalis intermedia* 447, life span, *Carabus glabratus*, *Carabus prolepticus*, British Isles, England 5894, life span, fecundity, emergence, *Perlesta placida*, USA, Texas 3859, life span, temperature effects, *Telenomus eucrotides*, China, People's Rep., Hunan Province 2792, light, photoperiodicity diapause, *Anabolia nervosa* 1103, *Lonchoptera lutea*, *Lonchoptera furcata*, British Isles, England 3559, males, occurrence, *Megastigmus pictus*, Poland 9110, morphology, disease transmission, livestock pests, *Stomoxys calcitrans*, *Tabanidae* 3743

Life cycle, (continued)

- morphology, taxonomy, new species, *Rhipicephalus zambeziensis*, Africa 2377
Neophelus petiti, North America 2771.
Neuroptera 8876.
 oviposition, development, survival, *Argas persicus* 1181.
 oviposition, development, temperature effects, *Acrotichia intermedia* 2686
 oviposition, egg production, *Hybomitra bimaculata*, Switzerland 6718.
 oviposition, host plants, *Prosopis*, *Tetralopha euphemelia*, USA, Texas 5961
 oviposition, streams, *Philopotamus montanus*, British Isles, Lake District 2794.
 parasites, *Dendrosoter protuberans*, *Entodon leucogramma*, *Scolytus multistriatus* 2017.
 parasites, host preferences, *Nosomma monstruosum* 7548.
 parasites, infection, malpighian tubules, *Gregarina hyobii*, *Ophryocystis* *hyobii*, *Hybomitra abietis* 5726.
 parasites, infection, *Plasmodium falciiparum*, *Anopheles balabacensis* 8151
 parasites, *Pleiotaphora schubergii* *neustrii*, *Malacosoma neustrii* 8124
 parasites, *Rhipicephalus haemaphysaloides* *haemaphysaloides* 5947
 parasitoids, *Dibrachys boarmiae*, *Galleria mellonella* 9131
 parasitoids, *Ephedrus plagiator*, *Proclitus*, *Fraxinus excelsior* association 9142.
 parasitoids, *Nilaparvata lugens*, *Sogatella furcifera* 9136.
 parasitoids, *Phasgonophora sulcata*, *Agrilus bilineatus*, USA, Wisconsin 2016.
 parasitoids, *Trichopoda giacomelli*, *Nezara viridula* 2018.
 pathogens, infection, *Nosema carpocapsae*, *Cydia pomonella* 2633.
 pest control, *Nilaparvata lugens* 4590
 pest outbreaks, *Choristoneura occidentalis*, *Dioctryna reticulellus*, *Cydia*
Zeiraphera beseniana, *Nematocampa filamentaria*, *Griseola radicans*, *Aclens*
gloverana, USA, Idaho 9305.
 pests, control programs, *Lymantria xylinia*, China, People's Rep. 4580.
 pests, damage, crop fields, *Diatrocha* 7715.
 pests, *Dichocrocis punctifera* 6924.
 pests, domestic animals, *Haematopinus tuberculans* 6070.
 pests, infestation, citrus groves, *Araceae fasciculatus*, USA, Florida 8565.
 pests, *Podagrira punctifolia*, Sudan 2852.
 pests, *Rhopalosiphum maidis*, *Zea mays*, Idaho 9338.
 pests, *Zonocerus variegatus*, Nigeria 8481.
 phenology, bogs, *Chaoborus*, USA, Michigan 7015.
 phenology, *Graphiphora*
 phenology, mathematical models, *Choristoneura fumiferana* 8285.
Pieris arpa, Venezuela 2777.
 pests, tundra, *Chironomus*, USA, Alaska 5149.
 population dynamics, *Empoasca kerr*, Pakistan 9161.
 population dynamics, gynoparae, *Rhopalosiphum padi* 2681.
 population dynamics, *Magdica septendecim* 8401
 population dynamics, mating, *Aedes innotens*, *Aedes atrisulcus*, Japan.
Yueyama Is. 7574.
 population dynamics, parasitoids, *Anthrax gland*, *Anthrax anis* 8383.
 population, feeding behavior, food organisms, *Limnognathus nitidus*, *Nilaparvata*
lugens 8618.
 predators, sexual reproduction, predator-prey interactions, *Coccinellidae*,
Acyrthosiphon pisum 2871.
 production, *Chironomus plumosus*, USSR, Armenia, Sevan L. 7805.
Pseudanthemus *ham*, USA, East 9097
 rearing, methodology, *Anomala transvaalensis* 1962.
 rearing methodology, *Heteronychia arator*, *Heteronychia tenuistriatus* 8861
 reproduction, blood meals, dispersion, *Aedes cataphylla* 6712.
 reproduction, *Choristoneura occidentalis*, USA, Washington 7519.
 reproduction, environmental effects, *Bruchidius affinis* 6653.
 reproduction, *Gerris*, Austria 7809
 reproduction, population growth, *Curtallia elephas*, Hungary 7703
 reproduction, *Pterostichus panzeri*, Austria 6706
 reproductive behavior, oviposition, *Simulium fulvum* 4330.
 reproductive behavior, parasites, *Gonozyx emigratus*, *Parameylois transtella*
6754.
 reproductive systems development, blood meals, *Mansonella richardii* 9058
Reptalia differens 7526
 seasonal variations, *Hagenomyia micans*, *Myrmelom formicarius*, Japan 4339
 secretions, Van der Vocht organ glands, *Polistes federatus* 6592
 sexual reproduction, oviposition, generations, *Chironomus yoshimatsu*, Japan,
Zempukuji R. 3556.
streams, *Arctophyes grandis*, USA, Idaho 5434.
survival, growth, larvae, *Xyletinus peltatus* 2701.
synchronization, seasons, diapause, pest control, *Diatraea grandiosella*,
Leptinotarsa decemlineata 8446.
telomeres, *monticola*, USA, Delaware 9112
Thylodina contractus 1703
weather effects on, disease transmission, mathematical models, *Isodens ricinus*
1361.

Life cycles,

- digestive tract parasites, *Stenodactylus chondromorpha*, *Chondromorpha kelsarti*
4182.

Life history,

- adaptations, host plants flowering, *Schinia mitis*, *Pyrrhophaps* 6790
association, host plants, *Euperyx notata* 5886
Acanthia spruius, oviposition, development, phenology, flowering, soil
temperature 1867
benthos, lotic environment, seasonal variations, New Zealand, Waitakere R. 451
biology, reviews, *Phenacoccus manihoti*, Africa 1194
bionomics, *Batocera lineolata*, Japan, Tokyo 5144
bionomics, *Cryptorhynchus lapathi*, China, People's Rep., Liaoning Province 2780
bionomics, parasitoids, *Euplectrus kuwanae*, *Argyrogramma albostriata* 1223
bionomics, streams, *Arctophyes grandis*, USA, Idaho 5434
Brachys tessellatus, bionomics, host plants, *Quercus laevis*, USA, Southeast 1988
breeding success, longevity, *Drosophila pseudoobscura* 9086
brood care, feeding, *Anticarsus adiabatus*, *Eudynerus formosanus* 1913
Caroliella beveriana, USA, California 6722
Carinus decies, USA, Oregon 7523
Cloen cognatus 1950
coexistence, *Ephemera*, USA, Pennsylvania, White Clay Creek 5430
community composition, *Insecta*, USA, Arizona, Sycamore Creek 3870
comparison, biotypes, *Simulium*, USA, California 3866
Desmoria beuthia, USA, California, Sagehen Creek 3868
development, *Empoasca dolichi*, Nigeria 2772
development, *Euproctis lunata* 4323
development, larvae, *Brachythemis contaminata* 8280
development, overwintering, *Operophtera occidentalis*, USA, Oregon 8282
Life history, (continued)
development, oviposition, longevity, rearing, *Amblyseius citrifolius* 6719.
development rate, temperature effects on, *Artidropa* 5833.
development, reproduction, longevity, *Bedeilia somnulentella* 6727.
development, reproduction, *Philonthus longicornis* 6726.
development, vectors, disease transmission, *Aedes africanus* 3687.
developmental stages duration, algaribus, *Insecta* 5628.
developmental stages, *Drosophila*, *algaribus*, Panama 1986
diapause, feeding, population dynamics, *Neptulca castanopis* 3561.
diapause, overwintering, hibernation, *Papilionoidea*, *Hesperioidea*, North America
6880
diets, host plants, *Myiodesmus undecimpustulatus maculosus* 5151.
diets, pests, *Helopeltis antonii*, Sri Lanka 4532.
Doryphora punctatissima 1982
ecological distribution, *Bidderia*, *Africa* 5520
ecology, aquatic animals, *Baetis*, *berni*, USA, West Virginia, Mingo Co. 2292.
ecology, oviposition, *Platygaster bilineatus*, host selection, *Metrosideros*
collina polymorphism, stress, USA, Hawaii 1961
ectoparasites, *Flomina externa*, *Tsuga canadensis*, USA, Pennsylvania 437
emergence, developmental stages, *Agromyza frontella*, Canada, Ontario 2782.
fecundity, *Cydia pychora* 434
fecundity, population density effects on, *Drosophila melanogaster* 2770
fecundity, reproduction, *Pecunophora scutiger* 3549
fecundity, selection, *Drosophila melanogaster* 3120
feeding behavior classification, *Bruchidae* 1388
feeding, ecological distribution, *Scymnus lividigaster*, *Leptotheca galbula*,
Australia 2874
flight muscle regeneration, degeneration, *Lissorhynchus oryzophyllus* 1732
food availability, limiting factors, *Tenodora adifolia senensis* 2906
food plants, sympatric populations, *Papilionidae*, Brazil 5233
freshwater environment, *Tasmanococcus*, *Cloen fluviatile*, Australia, Northern
Territory, Magela Creek 4657
fruit trees pests, *Nippo lachnus* *pinus*, India 4554.
genetic factors, temperature effects on gene expression, *Drosophila melanogaster*
7059
genetics, *Drosophila melanogaster* 3117.
geographical distribution, *Adoryphorus couloni*, New Zealand 453.
geographical distribution, *Coleophora multivittata*, *Coleophora alifolia* 5881
geographical distribution, mating behavior, *Leus hamatus* 4331
geographical distribution, *Metocetus paradoxus* 5517
geographical distribution, morphology, developmental stages, *Eurycnemus crassipes*
4928.
geographical distribution, new records, *Japyx solifugus*, India, Poona 5521.
growth, streams, *Philopotamus montanus*, British Isles, Lake District 2794
habitat, ecological distribution, *Spangleromyia albiventris*, USA, Alabama 5139.
habitat, *Thelania*, USA, West 7513
host plants, *Barris arctiborax*, *Pontania oleaceae* 6809
host plants damage, *Eura amerinae* 9088
host plants, larvae morphology, *Allopius tantulus* 7515
host plants, pest control, *Holotrichia consanguinea*, India, Punjab 5363
host-parasite interactions, reproduction, *parthenocarpus*, *Frumenta mundinella*,
Soliman carolinense 449
immature stages, *Acanalonia bivittata*, *Acanalonia conica*, *laboratoris* 1984
immature stages, *Anomelus septentrionalis*, *Metacalla pruinosa*, *Osmenoides*
venusta, *laboratoris* 1985
immature stages, *Drosophila amphibia* *berce* 1955
interspecific relationships, host plants, *Endothena daeckiana*, *Sarracenia*
purpurea, Canada, Quebec 4528.
larva food sources competition effects on, *Musca autumnalis* 1274.
larval, morphology, *Illybius angustior*, Sweden 3986.
life cycle, *Haemaphysalis intermedia* 447
life span, *Pteris rapae crucivora*, dispersal, *Pteris rapae crucivora* 4325.
mating behavior, feeding behavior, *Sphodros abboi*, *Sphodros rufipes* 6714.
mating behavior, oviposition, development, *Laungo rector* 1187.
metamorphosis, body size effects on, *Oncophanes* 1956
morphology, geographical distribution, *Pseudopholus panoptes* 5138
morphology, geographical distribution, *Selidosema plumaria*, *Selidosema*
brunneana, Czechoslovakia 7104.
morphology, host plants, *Hemileuca groei* 7508.
morphology, immature stages, *Megamelus davis*, parasites 1987.
morphology, larvae, *Agabus elongatus*, *Agabus waasijterae* 4929.
morphology, larvae, *Holochroa dissociata dissociata* 7263
nesting behavior, colonial characteristics, *Bembix unyonis* 6982.
new records, geographical distribution, introduced species, *Delia coarctata*,
North America 3158
niche pattern, galls, *Aciurina*, *Chrysothamnus* 7792.
oviposition, flight activity, *Euprosperus euterpe*, USA, California 7511.
oviposition, host plants, *Hypurys burteri*, *Pontania oleaceae* 6728.
parasites, *Dendrosoter*, *Aphidius* 4382.
parasites, effects on hosts, pathology, biological control, *Mermithidae*,
Simuliidae 3403
parasites, man, *Sarcoptes scabiei* 666
parasites, *Retractoccephalus*, *Insecta* 7383
parasites, reviews, *Cuterebridae* 5912
parasites, *Trichosporia victoris*, *Cerigaria coromandeliana* 2630.
parasitoids, superparasitism, *Autographa californica* 8312.
Parthenocarpium, *Parthenocarpium wisniana*, British Isles 5908
pathogens, *Sporozoa*, *Orthoptera*, *Coleoptera* 5025.
pests, *Athergona*, Sudan 4562
pests, borers, *Agrilus bilineatus*, USA, Wisconsin 4333.
pests, *Mindanus abietinus*, USA, North Carolina 4336.
pests, *Telphusa pistaria*, Iran 5296
polymorphism, trophodynamic cycle, *Arctophyes grandis*, USA, Montana, Flathead R.
Basin 1714
population dynamics, demography, *Drosophila melanogaster* 7065.
population dynamics, environmental effects, *Hemilepachia pustulosa* 2860.
population dynamics, environmental effects, *Simuliidae* 1297.
population dynamics, *Eobria chychionus oudemansi*, *Platynothrus scottsbearii*
expansus, *Edwardsia elongata* 5883.
population dynamics, *Hemileuca olivacea*, USA, Mexico 5899.
population dynamics, *Hemides trunctorum* 5136
population dynamics, *Oligonychus ilicis*, infestation, *Ilex crenata*, USA, New
Jersey 444
population dynamics, pest control, *Athergona soccata*, Thailand 4568.
population dynamics, pests, *Psasodes strobi*, *Pinus strobus*, USA, Maine 6187.

Life history, (continued)

- population dynamics, population regulation, *Papilio xuthus* 2859.
 population dynamics, *Pseudococcus longispinus*, New Zealand 459.
 population dynamics, reproductive behavior, *Lycosa pseudoannulata*, China, People's Rep 5879.
 population dynamics, seasonal variations, Chironomidae, British Isles, England 4659.
 population dynamics, Tabanidae, Brazil, Manaus 4426.
 population ecology, reviews, Ephemeroptera 6233.
 population growth, *Amblyseius longispinus*, *Amblyseius delongi*, *Amblyseius paraki*, Japan 1184.
 population structure, *Aradus cinnamomeus*, Finland 1960.
 population studies, *Coptopteryx vindis*, *Coptopteryx argentina*, *Coptopteryx gayi*, Argentina, Buenos Aires 5237.
 predation, oviposition, fecundity, *Toxothynchites splendens* 1188.
 predators, *Andrallus spinidens*, Malaysia 4332.
 predators, seeds, *Citrium canescens*, *Paracantha culta*, *Orellia occidentalis*, *Homocoma stypicellum* 9105.
 predators, seeds, *Paracantha culta*, *Orellia occidentalis*, *Homocoma stypicellum* 5884.
 predators, weed control, *Carduus*, *Ceutorhynchus trimaculatus*, *Trichostrochilus hornius* 1979.
 production, season feeding, larvae, *Brachycentrus spinax*, USA, North Carolina 1484.
 rearing, *Arizama densa* 3550.
 rearing, *Culex sitens* 466.
 rearing methodology, *Cinara cronarti* 1682.
 reproduction, development, *Philonthus turbatus* 6709.
 reproduction, longevity, fecundity, *Philonthus musor* 6708.
 reproduction, parasites, *Aleochara moesta*, *Musca domestica* 6775.
 reproductive behavior, *Dasyproctus westernmani*, South Africa 471.
 reproductive behavior, longevity, *Armigeres subulatus* 462.
 reproductive behavior, Masaridae, South Africa 470.
 reproductive behavior, *Mastophora dizzydeani* 1949.
 reproductive behavior, oviposition habitat preferences, *Maruca testalis* 433.
 reproductive isolation, sympatric populations, *Eucherpea* 6856.
 reproductive strategy, energetics, egg production, *Gargaphia solani* 5911.
 reproductive strategy, mathematical models, *Drosophila* 2785.
 resource allocation, reproductive strategy, *Heliconia* 468.
 seasonal variations, occurrence, *Slaterocoris pallipes*, USA 2776.
Sehirus cinctus, USA, Illinois 8292.
 sexual behavior, nesting behavior, *Copris lunaris* 3533.
 sexual reproduction, *Chrysops hirsuticollis*, USA, California, Mendocino Co 5146.
 sexual reproduction, *Ecdyonurus*, British Isles, England, Lune R 3851.
 sexual reproduction, fecundity, *Gastrophysa polygoni*, British Isles, England 4334.
 stored products pests, *Sitophilus granarius*, *Sitophilus oryzae*, *Sitophilus zeamais* 5152.
Symmetrischema capnica parasites, *Agathis*, *Apanteles*, *Bracon*, *Apsilophrys capicium*, *Pentieria* 6720.
 taxonomy, developmental stages, *Centrophlebotomyia furcata*, Israel 4002.
 taxonomy, morphology, *Caryocolum*, Europe 4887.
 temperature effects, humidity effects on, *Dermacentor silvarum* 475.
 temperature effects on development, survival, *Oligonychus subnudus*, *Oligonychus milleri* 8283.
 wildlife management, wildlife conservation, Lepidoptera, Canada, Newfoundland 2107.
Life span,
 adults, dispersal, *Pieris rapae crucivora* 4325.
 age distribution, population structure, *Aradus cinnamomeus*, Finland, Hanko Peninsula 5217.
 dry weight, workers, *Apis mellifera* 8208.
 enzymatic activity, superoxide dismutase, correlation analysis, *Drosophila melanogaster* 946.
 flight activity, energetics, physiology, *Apis mellifera* 4241.
 life cycle, *Carabus glabratus*, *Carabus problematicus*, British Isles, England 5894.
 life cycle, *Perlesta placida*, USA, Texas 3859.
 life history, genetics, *Drosophila melanogaster* 3117.
 mating delay, *Spodoptera littoralis* 5822.
 metabolic rate effects on, *Musca domestica* 193.
 metabolism, oxygen consumption, *Musca domestica* 4237.
 pests, host plants, resistance, susceptibility, *Medicago sativa*, *Therioaphis trifolii* 7757.
 physical activity, effects of temperature, sex ratio, *Musca domestica* 429.
 sexual reproduction, physiology costs, *Drosophila melanogaster* 5056.
 temperature effects, life cycle, *Telenomus euproctides*, China, People's Rep., Hunan Province 2792.
Life tables,
 comparison, *Trichogramma brevicapillum*, *Trichogramma pretiosum* 7424.
 pest outbreaks, crop fields, *Saccharum officinale*, *Mogannia minuta*, Okinawa 6109.
Polistes exulans, parasites, *Chalcidella iphizalis*, *Elasmus pumilus*, predation, *Crematogaster laevicula* 2155.
 pupae, survival, oviposition, *Agromyza frontella*, USA, New York 450.
 reproduction, *Tetranychus urticae* 3555.
Ligands,
 binding, microsomes, cytochrome P-450, *Musca domestica* 6554.
Light,
 adaptations, eye, *Romalea microptera* 148.
 adaptations, photoreceptors physiology, *Apis mellifera* 6534.
 DNA chromatin, binding, *Drosophila melanogaster* 1510.
 effects on emergence, circadian rhythms, *Monarthralpus buxi* 6713.
 effects on oviposition, *Aedes vexans* 5077.
 effects on oviposition, host plants, *Aphidoletes aphidimyza* 6679.
 environmental factors, pupation, site selection, population studies, *Drosophila nigroparvula*, *Drosophila mettleri* 8375.
 factors affecting, emergence, diel periodicity, Chironomidae, Canada, Ontario, Windrow Farm Stream 8604.
 flight, diurnal variations, *Helicoverpa armigera* 6693.
 locomotor activity, photokinesis, photokinesis, *Tribolium castaneum*, *Tribolium confusum* 5127.
 orientation, visual perception, *Trialeurodes vaporariorum* 8265.
 photoperiod, effects on development, morphogenesis, *Euschistus tristigmus* 7462.
 phototaxis, *Lucilia sericata* 7506.
 polarization, orientation, *Apis mellifera* 7507.

Light, (continued)

- polarization, orientation, navigation behavior, *Apis mellifera mellifera* 8263.
 polarization, role, navigation behavior, *Conixidae* 2857.
 polarization, visual perception, ultrastructure, ommatidia, *Calliphora erythrocephala* 4967.
 rearing, methodology, *Insecta* 3241.
 sensitivity, compound eyes, ultraviolet radiation, light traps, *Spodoptera exigua*, *Spodoptera frugiperda* 911.
 visual stimuli, feeding behavior, host plants, *Synanthedon pictipes* 5929.
 wavelength effects on phototaxis, *Dendroctonus pseudotsugae*, *Trypandendron inaeum* 2753.
Light effects,
 activity patterns, *Phlebotomus*, Yugoslavia 2766.
 colonization, crop protection barriers, behavior, *Myzus persicae* 1172.
 compound eyes, pigments, migrations, *Myndus crudus* 3297.
 diel activity, emergence periodicity, Chironomidae, USA, Florida 152.
 larval fungal flora toxicity, *Fusarium*, *Tenebrio molitor* 996.
 vertical migrations, larvae, *Chaoborus* 3619.
Light intensity,
 effect on pest resistance, host plants, *Lycopersicon hirsutum*, *Manduca sexta* 9340.
 effects on development, oligopause, *Aleyrodes asari* 7464.
 mating behavior, females calling behavior, males response, *Chilo suppressalis* 3531.
 metamorphosis, *Cloeon cognatum* 1950.
 migrations, *Nemobius sylvestris* 153.
 photoreceptors, response, adaptations, *Locusta migratoria*, *Valanga irregularia*, *Calliphora stygia* 4969.
 pits construction, predation, larvae, *Myrmeleon immutatus* 5126.
 soil, burrowing behavior, pits construction, *Myrmeleon immutatus* 6223.
 vision, compound eyes, migrations, pigments, *Insecta* 4139.
 visual discrimination, color, brightness, achromatic vision, *Apis mellifera carnica* 4973.
 visual discrimination, color, brightness discrimination learning, achromatic vision, *Apis mellifera carnica* 4974.
 visual discrimination learning, *Apis mellifera adansonii*, *Melipona quadrifasciata* 5123.
 visual perception, compound eyes, electrophysiological recording, Lepidoptera 7300.
Light traps,
 bait, hosts, CDC trap, *Culiseta melanura* 5620.
 compound eyes, light sensitivity, *Spodoptera exigua*, *Spodoptera frugiperda* 911.
 efficacy, illumination effects on, *Chrysoperla carnea* 3611.
 electrode-type, catching methods, efficiency, Lepidoptera 7254.
 protection, methodology, *Culex*, USA, California 859.
 surveys, species composition, Macrolepidoptera, Yugoslavia 3936.
Lignyodes,
 morphology, taxonomy, Turkey 4802.
Lignyodes dieckmanni,
 new species, taxonomy, Turkey 4802.
Lignyodes enuculator,
 morphology, taxonomy, Turkey 4802.
Lignyodes uniformis,
 morphology, taxonomy, Turkey 4802.
Ligyrocoris diffusus,
 courtship, stridulation, calling behavior, males 1904.
Limatus durhami,
 biological control, pathogens, *Bacillus thuringiensis* 630.
Limatus flavisetosus,
 biological control, pathogens, *Bacillus thuringiensis* 630.
Limnephilidae,
 habitat, body size, case construction, geographical distribution, freshwater environments 7807.
Limnephiloidae,
 check lists, geographical distribution, habitat, USA 8695.
Limnephilus,
 flight, wings, aerodynamic properties 6522.
Limnephilus bipunctatus,
 new records, geographical distribution, Finland 8673.
Limnephilus fenestratus,
 new records, geographical distribution, Finland 8673.
Limnephilus pallens,
 toxicity pH, metals, ponds, Canada, Northwest Territories 6696.
Limnia paludicola,
 new records, geographical distribution, Ireland 4706.
Limnoscoris insularis,
 streams, flooding, substrata, environmental effects, abundance, Costa Rica 2294.
Limnoscoris fonsarum,
 cadmium, radioisotopes, uptake, bioaccumulation 936.
Limnoscopus nitidus,
 feeding behavior, predation, life cycle, food organisms, *Nilaparvata lugens* 8618.
Limnophila apollina,
 abundance, ecological distribution, activity patterns, Canada, Ontario, Salem Creek 3856.
Limnophorus,
 chromosomes, sex determination 8637.
Limoniidae,
 fauna, systematics, France 4728.
Limosina,
 taxonomy, morphology 2417.
Limosina illiputana,
 new species, taxonomic revision 2417.
Limosina parvula,
 morphology, taxonomy 2417.
 new species, taxonomic revision 2417.
Limosina simplex,
 morphology, taxonomy 2417.
Limothrips,
 feeding behavior, observation methods 4363.
Limulids,
 neurons, Octopamine receptors 130.
Linaria vulgaris,
 pollination, flowering phenology, seed set, *Insecta* 5203.
Lindane,
 chemical control, nuts pests, *Helopeltis antonii*, Sri Lanka 677.
 chemical control, pest control, *Spodoptera litura* 5355.

- Lindane, (continued)**
effects on community composition, soil, non-target organisms, Arthropoda, USA, California 2149.
effects on damage susceptibility, *Pinus sylvestris*, *Hylobius* 9315.
insecticides, effects on carbohydrates, lipids, *Periplaneta americana* 5791.
insecticides, irradiation, toxicity, *Tribolium castaneum* 7418.
insecticides, storage, efficacy, *Callosobruchus maculatus*, *Callosobruchus chinensis* 7686.
insecticides, toxicity, *Dendroctonus brevicornis*, *Enoclerus lecontei*, *Tennochila chlordia* 4228.
isomers, toxicity, *Drosophila* 5040.
pest control, *Dendroctonus frontalis*, *Pinus* 8484.
pesticide resistance, resistance mechanisms, *Musca domestica* 1849.
pesticide resistance, strains, *Dermestes maculatus*, *British Isles* 3115.
pesticides, effects on oviposition, *Lyctus brunneus* 1060.
pesticides (organochlorine), toxicity, *Musca domestica* 7414.
toxicity, stored products pests, *Insecta* 7409.
- Lindingaspis rossi**,
pests, abundance, ornamental plants, Egypt 7650.
- Lincelation**,
aggregation pheromone, allelochemical activity, biochemistry, competition, *Trypoderon lineatum*, *Gnathorhynchus retusus*, *Gnathorhynchus sulcatus* 1776.
- Lines**,
diapause eggs, protein composition, *Bombix mori* 9420.
- Linkage**,
chromosomes, mutants, *Aedes albopictus* 769.
enzymes loci, characterization, *Incisitermes schwarzi* 2300.
gene mapping, *Aedes aegypti* 1490.
genes, DNA structure, evolution, *Antheraea polyphemus* 1492.
genetic analysis, mutants, *Aedes togoi* 7851.
genetic variation, selection, heritability, *Drosophila melanogaster* 5441.
selection, malate dehydrogenase enzyme polymorphism, relationship chromosomes polymorphism, *Drosophila subobscura* 9394.
- Linkage disequilibrium**,
correlation genetic variance, allozymes, *Drosophila subobscura* 7866.
genes, selection, *Drosophila subobscura* 1497.
loci inversion, recombination, *Drosophila melanogaster* 2313.
population genetics, *Drosophila montana*, USA, Utah 1558.
- Linognathodes**,
taxonomy, morphology 8745.
- Linognathus ovillus**,
parasites, livestock, pest control, Australia 3746.
- Linognathus pedalis**,
parasites, livestock, pest control, Australia 3746.
- Linognathus setosus**,
case reports, infestation, *Canis familiaris*, USA 2909.
- Lipoic acid**,
biosynthesis, *Periplaneta americana*, *Zootermopsis angusticollis*, *Acheta domestica* 6564.
effects on spermatogenesis, diets, *Acheta domestica* 1121.
- Lipoic acid**,
diets, nutrition, *Mamestra configurata* 8079.
- Lipophilic**,
airborne dispersal, coastal environment, Japan, East China Sea 2101.
- Lipum utilitissimum**,
infestation, pests, *Trionymus dimidiatus*, *British Isles*, England 2096.
- Lipophilic**,
foraging behavior, strategy, webs, site location 5170.
- Lichthinus**,
new species, Greece 7142.
- Liodontomerus curticaudatus**,
new species, taxonomy, Hungary 37.
- Liodoria serricornis**,
new records, geographical distribution, rare species, Sweden 4725.
- Lipophilic**,
taxonomic revision, morphology 5551.
- Lipophilic glaber**,
taxonomy, morphology 3551.
- Lipophilic yuku**,
new species, taxonomy, morphology, USA, Alaska 5551.
- Liothrips karayi**,
pests, host plants, *Piper nigrum*, India, Kerala 6946.
- Lipaphys erysimi**,
infestation, parasites, seasonal variations, *Diaretus rapae*, India, Madhya Pradesh 6767.
juvenile hormones analogues, terpenoid lactones, effects on morphogenesis 6641.
pest control, endosulfan, efficacy 7736.
pest control, insecticides, crop fields 7743.
pests, natural enemies, surveys, India 6943.
pests, toxicity, insecticides 7410.
taxonomy, cytology, chromosomes 7846.
- Liparthrum hispaniolium**,
new species, Dominican Republic 806.
- Lipeurus lawrensis tropicalis**,
oviposition, reproductive behavior, environmental effects 4258.
- Lipaphys erysimi**,
pests population dynamics, host plants, Brassica, India 7776.
- Lipid biosynthesis**,
fat body, hormones effects on, *Glossina morsitans* 1751.
fat body, migration, *Chorticoetes terminifera* 2557.
fat body, testes, *Triatoma infestans* 191.
metabolism, symbiosis, *Reticulitermes flavipes*, *Coptotermes formosanus* 3573.
- Lipid composition**,
castes, *Nasutitermes dunensis* 7716.
developmental stages, *Athaia proxima* 3323.
fatty acids, royal jelly, *Apis mellifera* 3390.
flight muscle mitochondria, temperature effects on, *Schistocerca gregaria* 5709.
flight muscle mitochondria, temperature effects on, *Schistocerca gregaria* 8105.
hemolymph, migration, *Danaus plexippus* 2566.
silk gland, cyanocobalamin, cobalt chloride effects on, *Bombix mori* 6588.
ultrastructure, cuticle, *Latreutes hesperus* 3273.
- Lipid metabolism**,
diapause, temperature effects, *Diatraea grandiosella* 1101.
diapause, temperature effects, *Diatraea grandiosella* 1101.
enzymatic activity, *Periplaneta americana*, *Locusta migratoria*, *Poia adjuncta* 1948.
- Lipid metabolism, (continued)**
flight activity, *Rhodnius prolixus*, *Triatoma infestans* 4955.
flight muscle, flight effects on, *Periplaneta americana* 958.
hydrocarbons biosynthesis, *Periplaneta americana*, *Zootermopsis angusticollis*, *Acheta domestica* 6564.
lipolysis, *Reticulitermes flavipes* 6568.
lipoproteins, hemolymph, *Locusta migratoria* 3328.
proline synthesis, hormones, fat body, *Glossina morsitans* 8089.
- Lipid peroxidation**,
age, metabolic rate effects on, *Musca domestica* 193.
- Lipids**,
attractants, females reproductive behavior, *Lucilia cuprina* 215.
bioaccumulation, oocytes, hemolymph, vitellogenesis, *Locusta migratoria* 395.
biochemical analysis, chromosomes, resistance, susceptibility, anesthesia 3447.
chemical composition, secretion, post-pharyngeal gland, queens, *Solenopsis invicta* 987.
cuticle, chemical composition, function, Arthropoda 883.
cuticle, chemical composition, *Melanoplus* 1729.
cuticle, mating behavior deterrents, *Glossina morsitans morsitans* 8260.
cuticles, chemical composition, *Diaperomera femorata* 109.
fatty acid composition, *Triatoma infestans* 192.
genital tract, chemical composition, fatty acids, *Acheta domestica*, *Gryllus* 198.
hemolymph, nuclear polyhedrosis virus infection effects on, *Spodoptera littoralis* 3411.
host plants, deterrents, pest resistance, *Sorghum bicolor*, *Locusta migratoria migratoroides* 5290.
insecticides, lindane, topical applications, *Periplaneta americana* 5791.
metamorphosis, growth, larvae, *Callosobruchus chinensis* 2712.
metamorphosis, growth, larvae, *Callosobruchus chinensis* 5072.
proteins, lipophorin, hemolymph, fat body, vitellogenin, biochemical analysis, *Locusta migratoria* 3330.
proteins, terminology, lipophorin, hemolymph, insects 94.
sex pheromone storage, glands, *Dermacentor variabilis*, *Dermacentor andersoni* 5008.
- Lipolysis**,
lipid metabolism, *Reticulitermes flavipes* 6568.
- Liposura bezzii**,
developmental stages, morphology 1712.
- Lipophoria**,
hydrocarbons transport, hemolymph, cuticle, *Periplaneta americana* 7307.
- Lipophorins**,
biochemistry, phenotypes, developmental stages, *Isotoma tigrina* 4155.
hemolymph, immunodiffusion, immunoelectrophoresis, *Locusta* 1767.
hemolymph, lipid metabolism, *Locusta migratoria* 3328.
purification, characterization, hemolymph, *Locusta migratoria* 2555.
- Liposcelis**,
pests, stored products, *Manihot esculenta*, Malaysia 5386.
- Liposcelis corrosivus**,
habitat, feces, *Tyto alba*, Yugoslavia 4436.
- Liposcelis entomophilus**,
habitat, feces, *Tyto alba*, Yugoslavia 4436.
- Liposcelis kideri**,
habitat, feces, *Tyto alba*, Yugoslavia 4436.
- Liposcelis rufus**,
habitat, feces, *Tyto alba*, Yugoslavia 4436.
- Liquidambar styraciflua**,
wood, decay, bait, *Glyptotermus trabeum*, *Isoptera* 704.
- Liriodendron tulipifera**,
flowers, association, *Lygocoris caryae*, *Lygocoris omniavagus*, *Cantharidae*, *Cephalosia*, USA, New York 5966.
- Lirionomyza luidobrensis**,
geographical distribution, high-altitude environment, abundance, Argentina 6704.
- Lirionomyza sativa**,
development, emergence, temperature effects 1869.
pest control, effects on crop yield, *Cucurbita pepo* 4567.
pest control, insecticides, *New Caledonia* 4558.
pest control, parasites, *Chrysomelomyia*, USA, Texas 4600.
pest control, *Phaseolus vulgaris* 709.
pest control, traps efficacy, color, shape 2195.
- Lirionomyza trifolii**,
introduced species, pest control, *British Isles* 6896.
pest control, chemical control, *Apium graveolens*, USA, California 9343.
pest control, parasites, *Chrysomelomyia*, USA, Texas 4600.
pest control, pest outbreaks 6205.
pest control, traps efficacy, visual stimuli 2195.
staining, methodology, eggs 4083.
- Liris argentata**,
nesting behavior, overwintering 3623.
- Lisposoma**,
occurrence, biogeography, Africa, South 9486.
- Lisocaphala**,
new species, morphology, taxonomy, Ivory Coast 1626.
speciation, association, *Ficus*, Africa 5964.
- Lissonosoma macroculum**,
new species, taxonomy, morphology, Brazil 6367.
- Lisosphoropus oryzophilus**,
flight muscle regeneration, degeneration, seasonal variations, life history 1732.
insecticides, efficacy, geographical variations, seasonal variations, USA 3013.
pest resistance, cultivars, *Oryza sativa* 6129.
- Listera ovata**,
interspecific relationships, pollination, *Ichneumonidae*, *Symphyta*, *Coleoptera*, *Diptera*, Sweden 5204.
- Listriophorus beaumonti**,
new species, taxonomy, morphology, Neotropical Region 8756.
- Listriophorus mayae**,
new species, taxonomy, morphology, Neotropical Region 8756.
- Listriophorus nitor**,
new species, taxonomy, morphology, Neotropical Region 8756.
- Listriophorus rarus**,
new species, taxonomy, morphology, Neotropical Region 8756.
- Listriophorus serratus**,
new species, taxonomy, morphology, Neotropical Region 8756.
- Listriophorus specialis**,
new species, taxonomy, morphology, Neotropical Region 8756.

- Lasiophorus typicus**,
new species, taxonomy, morphology, Neotropical Region 8756.
- Lasiotus**,
new species, taxonomy, morphology, 15 species, identification keys, North America 6379.
- Lissonotus bonariensis**,
seasonal variations, sexual reproduction diapause, phenology, morphology, New Zealand, Canterbury 1104.
- Lissonotus oreogensis**,
pest control, chemical control, USA, Ohio 2973.
temperature requirements, development, sexual reproduction, temperature effects, oviposition 3492
- Lissonotidae**,
morphology, geographical distribution, keys 2384.
- Lissonotus chelura chelura**,
morphology, malformations 1721.
- Literature reviews**,
geographical distribution, morphology, larvae, Lucanidae 2501.
morphology, neurophysiology, neurosecretion, neurons, Insecta 900.
pests, disease transmission, Culicidae 1350.
pests, Lygus 3759.
taxonomy, taxonomic revision, Carophilus humeralis 3764.
- Lithobiidae**,
taxonomy, morphology, Asia 4069.
- Lithobius crassipes**,
development, geographical variations, Sweden 5071
- Lithobius degeboei**,
new species, taxonomy, morphology, Asia 4069
- Lithobius erradiculus**,
taxonomy, morphology, Asia 4069.
- Lithobius forficatus**,
antennae regeneration, electrical stimulation effects on 1090
chitin biosynthesis, molting, epidermis 5657
heart, muscles, cell membranes, ultrastructure 6541
pathogens, infection, ultrastructure, Barroussia schneideri 5754
- Lithobius indicus**,
new species, taxonomy, morphology, Asia 4069.
- Lithobius microps**,
development, morphology, morphogenesis 4253.
- Lithobius sculpturatus**,
taxonomy, morphology, Asia 4069
- Lithocolletis blancardella**,
pests, population dynamics, orchards, Malus, Switzerland 6918.
- Liodactylus leucogaster**,
biology, feeding behavior, geographical distribution, laboratories 1969.
- Lissonotus truncatella**,
host-parasite interactions, larvae, Rachiphusia ou, Autographa biloba, USA, Florida 1294.
- Lissonotodes carinii**,
parasites, development, Ornithonyssus bacoti 2634.
- Litorian**,
effects on cardiac muscle, action potential, Locusta migratoria 241.
- Litter**,
forest floor, abundance, clear cutting effects on, Arthropoda 2111.
forest floor, decomposition, nutrients, Arthropoda 2114.
forest floor, winter survival, Anthonomus grandis, USA, Mississippi 614.
- Litter fall**,
wood, association, abundance, feeding, Reticulitermes flavipes, Reticulitermes virginicus, USA, Southeast 8598.
- Littoral zone**,
colonization, water reservoirs, Formicae, Australia 9174.
freshwater environments, habitat adaptations, reproductive strategy, Scatella picea 6861.
- Livestock**,
activity patterns, pests effects on, Haematobia irritans 3688.
babesiosis, vectors, Hyalomma marginatum rufipes 3693.
cattle, chickens, systems, insecticides, Bay Vi 7533, Musca autumnalis, Musca domestica 9326.
cattle, disease transmission, infectivity, Babesia bigemina, Boophilus decoloratus 8420.
cattle, ear tags, insecticides, chemical control, Musca autumnalis, Haematobia irritans 9257.
cattle, pesticide applications, dipping, insecticides, coumaphos 8433.
disease transmission, babesiosis, Boophilus microplus 3832.
feces, abundance, seasonal variations, Histeridae, USA, Texas 4481.
infection, pest control, Theileria sergenti, Babesia bigemina 3682.
infestation, disease transmission, pest control, Boophilus microplus, Australia 2934.
infestation, nymphs, Ornithodoros savignyi, Ornithodoros megnini, Argas persicus 2041.
parasites, pest control, Damalinia ovis, Linognathus pedalis, Linognathus ovillus, Australia 3746.
parasites, surveys, Ixodoidea, Yemen, Arab Rep. 6067.
parasites, 33 species, Ixodoidea, Ethiopia 1309.
pathogens, vectors, Theileria taurogalli, Rhipicephalus appendicularis 3657.
pest control, efficacy, Ixodoidea 4524.
pesticide applications, spraying, Sus scrofa, Mallophaga, Anoplura, Psoroptidae 8429.
pests, abundance, Musca autumnalis, USA, South Carolina 3673.
pests, feeding, effects on avoidance behavior, grazing, cattle, Musca autumnalis 8568.
pests, hematophagy, pest control, Stomoxys calcitrans, Tabanidae 3743.
pests, infestation, Ixodoidea, Barbados 1328.
- Lixophaga**,
population status, parasites, Ostrinia nubilalis, USA, Connecticut 8399.
- Lixophaga distans**,
parasites, pest control, plantations, Diatraea saccharalis, USA, Louisiana 2957
parasitism, host-parasite interactions, chemical stimuli, Diatraea saccharalis 5941.
- Lixophaga mediocris**,
parasitism, Pinus taeda 1229.
- Lixosids**, association, competition, Campoplex frustaneae, Eurytoma pini 9140
- Lobesia botrana**,
temperature effects, growth, development, reproduction 352.
- Localization**,
adenylate cyclase, tissues, Locusta migratoria 930.
- Localization, (continued)**
genes, heat shock proteins, Drosophila melanogaster 4672.
insecticides, bioaccumulation, tissues, diflubenzuron, Pieris brassicae 1059.
iodine radioisotopes, trophallaxis, Bifiditermes becconi 2554.
- Location**,
sex pheromone glands, Lymantria dispar 5013.
- Loel**,
87A7 locus, 87C1 locus, gene expression, heat shock proteins, mutants, Drosophila melanogaster 8645.
- Adh locus**, genetic variance, population genetics, Drosophila melanogaster 9425.
alcohol dehydrogenase, enzymatic activity, genotypes, Drosophila melanogaster 5443.
allozymes, wings length selection effects on, Drosophila melanogaster 9378.
chorion, clones, genes, Bombyx mori 6254.
chromosomes, ecdyone interaction, salivary gland, Drosophila melanogaster 2320.
cut locus, cloning, restriction endonuclease mapping, Drosophila melanogaster 9383.
dpp locus, gene mapping, alleles complementation, polytene chromosomes, Drosophila melanogaster 8635.
enzyme activity, electrophoresis, Simulium venustum, Simulium verecundum 7031.
enzyme polymorphism, chromosomes, alleles, Coelopa frigida 6255.
enzyme polymorphism, esterase, alleles, Drosophila mojavensis 5477.
enzymes, alcohol dehydrogenase, genetic variance, population genetics, Coelopa frigida 6278.
enzymes, linkage, sex chromosomes, characterization, Incisitermes schwarzi 2300.
excision, DNA repair, mutants, Drosophila melanogaster 5444.
gene expression, sex determination, gynandromorphs, temperature-sensitive mutant, Drosophila melanogaster 7824.
gene regulation, cells differentiation, Drosophila 5445.
globin, DNA genomes organization, Drosophila 7823.
inversion, linkage disequilibrium, recombination, Drosophila melanogaster 2313.
modification, xanthine dehydrogenase, polymorphism, Drosophila melanogaster 3069.
mus-105, mus-109, mutation, lethality, alleles, Drosophila melanogaster 8644.
ref(2)P locus, polymorphism, selection mechanisms, Drosophila melanogaster 7867.
Rpl1-C4 locus, association RNA polymerase II, Drosophila melanogaster 7045.
shibire locus, gene conversion, temperature-sensitive mutant, Drosophila melanogaster 9399.
temperature, allozymes, variation, Aedes aegypti 6238.
trithorax, alleles, mutation, Drosophila melanogaster 8643.
white locus, restriction endonuclease mapping, Drosophila melanogaster 7836.
- Locomotion**,
aerodynamic properties, flight, Calliphora erythrocephala 888.
chilling effects on, Periplaneta 7360.
comparison, Trochosa ruricola, Lycosa tentulata 887.
efficiency, predatory behavior, Notonecta 6231.
films, analysis, Arthropoda 852.
flight activity, dispersal, Dacus tryoni 5977
flight, Insecta 3274.
life cycle, pests, Zonocerus variegatus, Nigeria 8481.
mating effects on, females sexual behavior, Telegryllus commodus 4284.
mitochondria, malpighian tubules, 5-hydroxytryptamine effects on, Rhodnius prolixus 162.
muscles, neurophysiology, morphology, Periplaneta americana 4958.
orientation, Arthropoda 5862.
orientation, sex pheromone effects on, Periplaneta americana 4307.
running, morphology, leg, Carabidae 8063.
spermatozoa, ultrastructure, Aedes notoscriptus 105.
walking, visual discrimination, visual perception, Drosophila melanogaster 906.
- Locomotor activity**,
avoidance behavior, predator-prey interactions, Halobates robustus 3651.
circadian rhythms, compound eyes mutants, Drosophila melanogaster 3304.
circadian rhythms, entrainment, photoperiod, Pterostichus nigrita 6694.
circadian rhythms, environmental effects, Hemideina thoracica, New Zealand 4984.
circadian rhythms, feedback models, light effects, temperature effects, Hemideina thoracica 916.
circadian rhythms, pacemakers transplantation, Acheta domesticus 6527.
circadian rhythms, running, photoperiod effects on, Periplaneta americana 918.
circadian rhythms, temperature effects, Hemideina thoracica 155.
climbing, trees, larvae, Neodiprion sertifer, Finland 7522.
diets effects on, nutrient sources, proteins, sucrose, Anthonomus grandis grandis 8276.
diurnal variations, measuring techniques, Thanosimus dubius 1742.
electrophysiological recording, feedback control, leg muscles, Carausius morosus 890.
environmental effects, photoperiods, humidity, rearing, Locusta migratoria migratoroides 4261.
environmental effects, relative humidity, photoperiod, Locusta migratoria migratoroides 2541.
feedback control, leg, muscles, Carausius morosus 889.
flight control, antennae, aerodynamic properties, Agilus urticae 4956.
flight control, antennae, aerodynamic properties, Agilus urticae 4957.
food sources orientation, foraging behavior, Rhodnius prolixus 5926.
migrations, diet variations, light intensity, feeding behavior, Nemobius sylvestris 153.
migrations, pests, infestation, environmental conditions, Mythimna separata 1170.
photokinesis, photokinesis, Tribolium castaneum, Tribolium confusum 5127.
settling behavior, host plants, Aphis citricola, ovis malus 1243.
- Locusta**,
abdomen, injury, electrophysiological recording 8915.
flight, flight muscle metabolism 893.
lipoproteins, hemolymph, immunodiffusion, immunoelectrophoresis 1767.
malpighian tubules, secretion, environmental effects, hormones, stimulants 2613.
membrane potential, synapses, neurons, ocelli, brain 4961.
muscles, physiology, ion exchange, calcium 4122.
muscles, ultrastructure 6523.
oocytes, vitellogenesis, proteins adsorption 2715.
- Locusta migratoria migratoroides**,
cuticle, segments, membranes, ultrastructure, morphology 3271.
- Locusta migratoria**,
abdomen, cuticle, biochemical analysis, proteins, chitin 2515.
adenylate cyclase, localization, tissues 930.
ATP pyrophosphatase activity, malpighian tubules, inhibitors effects on 2572.
auditory perception, neurons, neurophysiology, tympanum, larvae 4970.
auditory perception, neurophysiology 5663.
bioaccumulation, lipids, oocytes, vitellogenesis 395.
biosynthesis, juvenile hormones, sexual maturity, ovary 4278.

Locusta migratoria, (continued)

- choline uptake, synaptosomes, central nervous system 4964
 corpora allata, biosynthesis, juvenile hormones, vitellogenesis 2714.
 corpora allata, juvenile hormones biosynthesis 2590.
 cuticle, physical properties, mechanical properties 7283.
 cuticle, sclerotization, biochemical characteristics 6520
 3-deoxy-3-fluoro-D-glucose, metabolism, effects on glycolysis, toxicity 6619.
 development, tympanum, receptors, cells, scolopidium, larvae 8218
 eggs, vitellin, binding, molting hormones, *Locusta migratoria* 3515.
 oogenesis, ecdysteroids, metabolism, synthesis 3345
 embryogenesis, leg. neurons 337
 enzymatic activity, lipid metabolism 948.
 enzymes, α , α -trehalase, flight muscle 4959
 enzymes, distribution, tissues, cell membranes 181.
 fat body, protein biosynthesis, vitellogenin 8942
 feeding behavior, diurnal variations, photoperiod 8301.
 flight activity, velocity, wing-beat frequency 2522
 food conversion efficiency, nymphs 4991
 glutamic acid channels, cell membranes, muscles membranes 1731.
 growth regulators, azadirachtin, effects on, oogenesis, ovary biosynthesis 377
 hemolymph, mechanoreceptors, ultrastructure 6531.
 hemolymph, hyperlipidemia, octopamine 174.
 hemolymph, lipoproteins, purification, characterization 2555.
 immunity, role, reticulo-hemolymphic tissue, *Bacillus thuringiensis* 4192.
 insecticides, effects on hormones release, hyperlipemic hormone, corpora cardiaca 5797.
 instars development, cytology, epithelium 3465.
 juvenile hormones, fat body, polyphoidy, vitellogenesis, protein biosynthesis 1775.
 larvae development, precocene I, precocene II effects on 1049.
 lipoproteins, hemolymph, lipid metabolism 3328.
 litorol, taurine, γ -D-glutamyl-taurine effects on cardiac muscle, action potential 241.
 mechanoreceptors, neurophysiology 6533.
 mitochondria, ribosomal proteins, fractionation, electrophoresis 3265
 muscles, enzymatic activity, temperature effects 2577
 neurons, coordination, spiracles, ventilation, thorax 5665.
 neurons, development, muscles, comparative studies, instars, adults 3277
 neurophysiology, mechanoreceptors, auditory perception 7293
 neurosecretory cells, localization, catecholamines, peptides 8907.
 octopamine biosynthesis, ganglia 2524.
 oocytes, ion exchange, electropotential 1134.
 pesticides, chloroform, desmethylchloroform, effects on hormones release 1784.
 photoreceptors, compound eyes, electrical properties 3293.
 photoreceptors, response, light intensity, adaptations 4969.
 physiology, flight muscles, invaginations, tracheolization, cytoplasm, metabolism 343.
 population genetics, chromosomes, geographical variations 4696.
 proteins, lipophorin, lipids, biosynthesis, fat body, vitellogenin, biochemical analysis 3330.
 proteins, vitellogenesis, immunochemistry, antisera, distribution 1133
 thorax ganglia, neurons, physiology, morphology 8065.
 toxicity, *Buthos judaicus* venom 5054.
 vibratory stimuli, mechanoreceptors, neurophysiology 3298.
 vitellogenesis, protein biosynthesis induction, polyribosomes, juvenile hormones 190.
 vitellogenin genes transcription, juvenile hormones stimulation, fat body 6569.
- Locusta migratoria cinerascens**,
 hormones, developmental stages, carbon dioxide effects on 3341.
 hormones, plasma levels, development 4163.
- Locusta migratoria migratoria**,
 canavanine effects on water balance 3370.
- Locusta migratoria migratorioides**,
 toxicity, antifeedants, quassinoids 2660.
- Locusta migratoria migratorioides**,
 environmental effects, relative humidity, photoperiod, locomotor activity, flight activity 2541.
 flight activity, velocity, energetics 8062.
 juvenile hormones, identification 2584
 microbiocidal activity, methyl-para-hydroxy benzoate, effects on survival 5821
- Locusta migratoria migratorioides**,
 oogenesis, proteins incorporation 1887
- Locusta migratoria migratorioides**,
 cuticle, proteins, biochemical analysis, developmental stages 4120
 host plants pest resistance, lipids, detergents, *Sorghum bicolor* 5290
 rearing, environmental effects, photoperiods, humidity, locomotor activity, flight activity 4261
- Locusta migratoria**,
 neurons, neurosecretion, histology, immunochemistry 901
- Locustana pardalina**,
 pests, susceptibility, insecticides, toxicity tests 5039
- Locustella naevia**,
 hormones, amino acid sequence 969
- Lobelia grandis**,
 cocum, symbiosis, bacteria 4365
- Lolium**,
 new genera, taxonomy 7985
- Lolium asperum**,
 new species, new genera, taxonomy, morphology, Ecuador 7985
- Lolita grandis**,
 digestive tract symbionts, procarvates, culture 2808
- Lolium perenne**,
 host plants, pest resistance, *Hyperodes bonariensis* 6799
 pasture yield, damage, *Teleogryllus commodus* 2254
- Lomatium**,
 host plants, pollination, flowering, Insects 6785
- Lomechusa**,
 surveys, geographical distribution, Mongolia, People's Rep. 3934
- Lonchopoda furcata**,
 geographical distribution, seasonal variations, occurrence, British Isles, England 3559
- Lonchopoda lutea**,
 geographical distribution, seasonal variations, occurrence, British Isles, England 3559
- Long-term effects**,
 photoperiod, temperature, development, *Pterostichus nigrita* 7443.
- Longevity**,
 adults, *Curtulio caryae* 456.
 adults, pupae storage, temperature effects, *Cochimyia hominivorax* 1868.
 breeding success, life history, *Drosophila pseudoobscura* 9086
 buffers effects on, pH, *Drosophila melanogaster* 3452
 comparative studies, diets, effects on, *Menochilus sexmaculata* 1117
 comparative studies, mass rearing, *Dacus cucurbitae*, 2768
 correlation, segregation chromosomes, *Drosophila melanogaster* 3090
 defective mutant, gene mapping, *Drosophila melanogaster* 5450
 diapause induction, environmental factors, *Barbara colfaxiana* 6640
 diets, effects on, *Cydia pomonella* 2765
 diets effects on, *Cyboodens javanus* 5090
 diets effects on, *Pectinophora gossypiella* 7459
 diflubenzuron effects on, *Oryza japonica* 5767
 effects of diets, *Dacus oleae* 1109.
 egg production, oviposition, *Heliothis virescens* 8213.
 fecundity, cultivars pest resistance, *Sorghum*, *Atherigona soccata* 4565
 fecundity, culture effects on, *Toxorhynchites ambioensis* 439.
 fecundity, diets, *Diaprepes abbreviatus* 5147.
 fecundity, food organisms, diets effects on, *Amblyseius gossipi* 7603
 fecundity, host plants effects on, *Helidula undalis* 6806.
 fecundity, life history, *Philonthus longicornis* 6726.
 fecundity, life history, *Philonthus turbidus* 6709.
 fecundity, parasitoids, temperature effects, *Pissonius laneieri* 2817
 fecundity, reproductive behavior, *Nezara viridula* 6629
 females, ethylene effects on 4264.
 foliage age, *Arachis hypogaea*, effects on, *Spodoptera frugiperda* 382.
 food consumption, microwave radiation effects on, *Apis mellifera* 7502
 food plants effects on, *Pterobelaes darlingensis*, *Pterobelaes alternatus* 7510.
 food plants, infection, potato leaf roll virus, *Leptinotarsa decemlineata* 7440.
 genetic factors, mutants, *Drosophila* 5057
 infection, parasites, *Plasmodium cynomolgi*, *Anopheles drus* 5749
 life cycle, parasites, *Gonizox emigrans*, *Parameyolus transiella* 6754
 life history, *Amblyseius citrifolius* 6719.
 life history, *Empoasca dolichis*, Nigeria 2772.
 life history, freshwater environment, *Tamiasocoris*, *Cloeon fluviatile*, Australia, Northern Territory, Magela Creek 4657.
 life history, parasites, *Aleochara moesta*, *Musca domestica* 6775.
 life history, *Philonthus misor* 6708.
 life history, *Scymnoides lividigaster*, *Leptotheca galbula*, Australia 2874
 males, diptero, haploids, workers, *Melipona quadrifasciata* 9032
 parasites, hosts population density effects on, *Apelinus semiflavus*,
Acyrtophorus pisum 8318
 parasites, instaration, *Macrocheles muscadomestica*, *Dermatobia hominis* 5086
 parasitism, effects on hosts, *Bursaphelenchus lignicolus*, *Monochamus alternans* 7623
 parasitoids, *Telenomus podisi*, *Trissolcus euschisti* 8322
 pathogens, infection, nuclear polyhedrosis virus, *Pseudoplusia includens* 7390
 population dynamics, sampling, *Melanophila sanguipes* 5994
 population levels, insecticides effects on, *Tetranychus turkestani* 2893
 radiation, progeny, *Pectinophora gossypiella* 2688
 reproduction, life history, *Bedellia sumulenta* 6727
 reproduction, parasitism effects on, *Trechopoda pennipes*, *Nezara viridula* 5936
 reproduction, temperature effects on *Chelindia vitiger* 6644
 reproductive effect, parasitoids, *Nathampipia stewartii*, *Chilo partellus* 8315
 sex pheromone, pheromone traps, *Synanthedon pictipes* 2230
 sexual reproduction, physiology costs, *Drosophila melanogaster* 5056
 temperature, development, larvae, *Leptothrips mali* 8219
 temperature effects, *Anthonomus grandis* 1105
 temperature effects, *Anticarsa gemmatilis* 1934
 temperature effects, *Cylas formicarius elegans* 1876.
 temperature effects on, predators, *Cybocephalus micans*, *Cybocephalus nigriceps* 7505
 temperature effects, *Pterobelaes darlingensis*, *Pterobelaes alternatus* 3545.
 temperature tolerance, apiculture, *Apis mellifera* 2213.
 xanthines, colchicine, *Vespa orientalis* 4948
- Longitarsus alabineus**,
 feeding behavior, weed control, *Heliotropium europaeum*, Australia 2950.
- Longitarsus nigripennis**,
 pests, host plants, *Piper nigrum*, India, Kerala 6946
- Lonocera**,
 damage, feeding effects on, *Hyadaphis tataricae*, Canada, Quebec 2043
 ornamental plants, pests, dispersal, *Hyadaphis tataricae*, USA 7793
- Lophoceros schottii**,
 host plants, alkaloids, tolerance, ecological distribution, *Drosophila mettleri* 4189
- Lophopteryx camelina**,
 occurrence, abundance, British Isles, Scotland 6705
- Lophoproctus luteator**,
 host searching behavior, egg laying, population density, hosts, *Neodiprion sertifer* 6757
- Lordithon**,
 new species, 16 species, taxonomic revision, synonymy, North, America, Central America 6380
- Lortia viridana**,
 sex pheromone, biochemical analysis 3347.
- Lothie environment**,
 benthos, life history, seasonal variations, New Zealand, Waitakere R. 451.
- Loxagrotis albicosta**,
 host plants, crops, North America 6156
- Loxocetes laeta**,
 venom, effects on blood coagulation, rabbits, man 8195.
- Loxocetes reclusa**,
 treatment, bites, stings 627.
- Loxocetes commutalis**,
 development, temperature, diets effects on 1859
 feeding behavior, food preferences, host plants 1994.
- Lublinia acacie**,
 new species, taxonomy, morphology, Uganda, Rwenzori Natl. Park 7203.
- Lublinia katookyensis**,
 new species, taxonomy, morphology, Uganda, Rwenzori Natl. Park 7203.
- Lucanidae**,
 larvae, literature reviews, geographical distribution, morphology 2501.
 taxonomy, *Psalidorems* 8775

- Luciferase**,
isoenzymes, characterization, *Photinus pyralis*, *Photinus pennsylvanica* 938.
- Lucilia cuprina**,
association, human settlements, India, West Bengal 9210.
- Lucilia cuprina**,
genetic control failure, eye color mutation 2348.
oogenesis, vitellogenesis, histology 2668
oviposition, chemical stimuli, odors 1917
pesticide resistance, genetic factors 3132
pesticide resistance, selection, dieldrin, diazinon, genotypes 7873
reproductive behavior, females attractants 215
- Lucilia sericata**,
fatty acids metabolism, enzymatic activity 202
phototaxis, feeding behavior, environmental effects 7506
- Luciola cruciata**,
body size, climbing, emergence, larvae, Japan, Kiyotaki R. 3861.
- Luciola malspina**,
Photinus luciferin 4-mono-oxygenase (ATP-hydrolysing), immobilized enzymes, kinetics, stability 8934.
- Lucinapse numenii numenii**,
parasites, *Numenius americanus*, USA, New Mexico 3581.
- Lunar rhythm**,
neurotransmitters, *Periplaneta americana* 121.
- Lupinus**,
host plants, pest outbreaks, *Macrosiphum albifrons*, British Isles, England, Kew Gardens 7744.
- Lures**,
attraction, ammonia, Tephritidae, Australia 3741.
pheromone traps, catching methods, trap height, *Potillia japonica* 8499.
pherotax, attraction, pheromone traps, efficacy, *Scolytidae* 3803
- Lutovirus**,
localization, salivary gland, disease transmission, *Myzus persicae* 8148
- Lutzomyia**,
host preferences, disease transmission, *Leishmania*, *Trypanosoma*, Panama 653
- Lutzomyia longipalpis**,
traps, adhesives, efficacy 50.
- Lutzomyia olmeca**,
host preferences, Panama 653.
- Lutzomyia olmeca olmeca**,
new subspecies, taxonomy, morphology, Brazil, Manaus 4839
- Lutzomyia panamensis**,
host preferences, Panama 653.
- Lutzomyia pennsylv**,
new species, taxonomy, morphology, Brazil, Central Amazon Region 7188
- Lutzomyia sanguinaria**,
host preferences, Panama 653.
- Lutzomyia termitophila**,
morphology, females 6506
- Lutzomyia umbratilis**,
disease transmission, *Leishmania*, epidemiology, Guyana 9237
- Lutzomyia vespertilionis**,
host preferences, Panama 653
- Lyasca equestris**,
coloration, mimicry, predation, *Parus major* 9214.
- Lycaena heteronea clara**,
wildlife conservation, role, education, USA, California 2112.
- Lycaena rusthoides**,
parapatric populations, systematics, geographical variations, morphology, USA, California 7123.
- Lycaenid**,
association, defense mechanisms, diets, *Formicidae* 1180.
- Lycaenidae**,
eggs, clustering, association, *Myrmecophilidae* 1193
predation effects on wings morphology, mimicry 2786
Taxonomy, nomenclature, species 2463
- Lychnuchoides frappenda**,
taxonomic revision, synonymy, *Atrytonopsis*, Mexico 7994.
- Lycopersicon**,
crop fields, sampling methodology, *Heliothis zea* 8529.
- Lycopersicon esculentum**,
crop fields, infestation, damage, *Ostrinia nubilalis* 6193
crop fields, pest control, insecticides, New Caledonia 4558.
crop fields, pest control, pathogens, *Bacillus thuringiensis*, *Lacanobia oleracea* 5300
crop yield, tomato leaf curl virus, insecticides effects on, *Bemisia tabaci* 3705
host plants, extracts, growth retardation, *Heliothis zea* 2083
host plants, oviposition site preferences, feeding, *Heliothis zea* 6166.
host plants, oviposition stimulants, chemotaxis, *Keiferia lycopersicella* 4402
host plants, site selection, oviposition, *Insecta* 2081.
host plants, toxins, diets, parasitoids, *Hypoosoter exiguae*, *Heliothis zea* 3578.
viruses, plant diseases, disease transmission, *Myzus persicae* 7654
- Lycopersicon hirsutum**,
pest resistance, photoperiod, light intensity effect on, *Manduca sexta* 9340.
pest resistance, wild type, *Trialeurodes vaporariorum* 9283.
- Lycoriella agarici**,
larvae, spatial distribution, *Basidiomyces* cultivation, *Lycoriella agarici*, Australia, New South Wales 2966
- Lycoriella mali**,
grazing, effects on, population levels, coprophilus fungi, oviposition 4479
population growth, composts, mushrooms cultivation 6172
- Lycosa howardi**,
water loss, cuticular permeability, metabolism, USA, Hawaii 2607.
- Lycosa maitiosa**,
sex chromosomes, karyotypes 1514.
- Lycosa pseudoannulata**,
life history, population dynamics, reproductive behavior, China, People's Rep 5879.
predators, insecticides effects on, pest control, *Nilaparvata lugens* 6162.
- Lycosa rubida**,
hosts, parasitism, effects on development, *Mantispa uhleri* 4369.
- Lycosa tarantula**,
comparison, locomotion, *Trochosa ruficula* 887.
- Lycosa thorelli**,
sex chromosomes, karyotypes 1514.
- Lycosidae**,
abundance, diurnal variations, *Ipomoea batatas* crop fields 4535.
- Lycidae**,
mass rearing, methodology 858
- Lycus brunneus**,
oviposition, pesticides effects on 1060.
- Lydeella thompsoni**,
parasites, hosts diapause effects on, *Archana geminipuncta* 1857.
parasites, occurrence, biological control, *Ostrinia nubilalis*, USA, Delaware 2033
population decline, introduced species, parasitoids, *Ostrinia nubilalis*, USA, Iowa 6008
- Lygacus**,
RNA biosynthesis, transport, salivary gland 3072.
- Lygaeidae**,
geographical distribution, South Africa 8801.
morphology, genitalia, phylogeny 9039.
- Lygaeoidae**,
flight activity, seasonal variations 1977.
- Lygaeosoma**,
new species, morphology, China, People's Rep. 824.
- Lygaeosoma longulum**,
new species, morphology, China, People's Rep. 824.
- Lygaeosoma yunnanensis**,
new species, morphology, China, People's Rep. 824.
- Lygaeus equestris**,
mounting behavior, copulation, competition 3535.
- Lygaeus kalmii**,
chromosomes, population genetics, taxonomy 6282.
development energetics, temperature effects 2783.
- Lygaeus militaris**,
development, sterility 7479.
- Lygocoris caryae**,
association, flowers, *Liriodendron tulipifera*, USA, New York 5966.
- Lygocoris communis**,
chemical communication, sex pheromone, pests 8098.
- Lygocoris omnivagus**,
association, flowers, *Liriodendron tulipifera*, USA, New York 5966.
- Lygocoris vitticollis**,
life cycle, host plants, feeding, *Acer rubrum*, USA, Pennsylvania 5902.
- Lygostomus**,
host plants, parasites, species composition, *Coccoidea*, Africa 5206.
- Lygus**,
eggs, parasites, distribution, host plants 8384.
food organisms, predators 1197.
overwintering, survival, host plants 6012.
pests, bibliographies 3759.
species composition, abundance, crop fields, weeds, USA, Arizona 4604.
- Lygus desertinus**,
association, abundance, host plants, *Kochia prostrata* 4392.
association, weeds, host plants, USA, Washington 8350.
sympatric populations, interspecific hybridization, *Lygus elisus*, Arizona 3607.
- Lygus elisus**,
association, weeds, host plants, USA, Washington 8350.
sympatric populations, interspecific hybridization, *Lygus desertinus*, Arizona 3607.
- Lygus hesperus**,
abundance, movements, agricultural practices effects on, crop fields 6198.
association, weeds, host plants, USA, Washington 8350.
bioassays, insecticides, field trials, electronic equipment, incubation 8015.
food organisms, predator-prey interactions, *Nabis americoferus* 5927.
hosts, parasites, *Leiothron uniformis*, rearing, instars, biology 2022.
mass rearing, artificial diets 8016.
mass rearing methodology, feeding, oviposition 8023.
oviposition, genotypes, host plants 1903
thermoregulation, water relations, arid zones 5707.
- Lygus lineolaris**,
gustatory stimuli, discrimination, sugars, amino acids, allelochemicals 5163.
host plants pest resistance, cultivars, *Vigna unguiculata* 8522.
pests, cultivars, resistance, *Vigna unguiculata* 4614.
rearing methodology, diets 8011
traps, sampling methodology 6108
- Lymantria dispar**,
sex pheromone, pheromone emission.
- Lymantria decipiens**,
parasites, new species, *Cryptoxilos lymantriae* 2451
- Lymantria dispar**,
abundance, surveys, USA, Michigan 2363.
biological control, nuclear polyhedrosis virus 5392
capture-recapture studies, dispersal, host plants, larvae 6813.
capture-recapture studies, distribution, dispersal, survival, traps, pheromone 854
cold temperature, winter mortality, eggs, Canada, Quebec 2127.
diets, nutrition, nitrogen 4150
diets, rearing, nuclear polyhedrosis virus, pathogens 3702.
8-endotoxin toxicity, *Bacillus thuringiensis* 7381.
epiphysis, leg. functional morphology 8006
fecundity, population growth, North America 1972.
gut histopathology, pathogens effects on 7382.
hatching sequence, sex differences 5807.
host plants, foliage, effects on dispersal 5980.
hosts, parasites competition, *Apanetes melanoscelus*, *Rogas lymantriae* 7545.
hosts, parasitoids, nutrition, nitrogen uptake, *Brachymeria intermedia*, *Coccygomyia tunonellae* 8326.
hosts, parasitoids, strains, interbreeding, *Apanetes melanoscelus* 8324.
hypersensitivity, man 9235.
infection, nuclear polyhedrosis virus, parasites discrimination, *Apanetes melanoscelus* 5542.
infection, pathogens, fungi 5741.
intersexes, sex determination, genetics, Japan 3918.
larvae, cell culture, nuclear polyhedrosis virus, proteins, enzyme-linked immunosorbent assay 1091
males, copulation duration, γ -radiation effects on 373
metabolism, agrochemicals, growth regulators, EL-494 4999
mutants, coloration, larvae, Japan, Honshu 7047
new records, geographical distribution, Canada, Newfoundland 8692
Nodamura virus, purification, characterization 9899
nuclear polyhedrosis virus, rearing, virulence, biological control 3828

- Lymantria dispar*, (continued)**
parasites, infection, seasonal variations, Hexameris, Japan 5733.
pest control, biological control, parasitoids, habitat preferences, *Compsilura concinnata* 8331.
pest control, forest management, cost-benefit analysis 734.
pest control, historical accounts, USA, Michigan 7786.
pest control, parasitoids, *Brachymeria lasus*, *Coccycimimus disparis*, USA, Connecticut 8466.
pest control, pathogens, pest control 7371.
pest control, pest outbreaks, review, USA, California 6905.
pest outbreaks, defoliation, USA, New Jersey 4542.
pheromones, attractancy, sterilized organisms 5872.
rearing, nuclear polyhedrosis virus, yield, diets, carrageenans 8008.
sex pheromone glands, morphology, histology 5013.
sex pheromone, pheromone emission, neurophysiology 5699.
silk, exploratory behavior, parasites, exposure time, diurnal variations, *Apanteles melanoscelus* 1219.
susceptibility, nuclear polyhedrosis virus 2635.
- Lymantria monacha*,**
flight activity, seasonal variations, environmental effects 7512.
larvae feeding behavior, environmental effects 491.
- Lymantria xyliina*,**
life cycle, pests, control programs, China, People's Rep. 4580.
- Lymantria orbus*,**
hyperparasitism, oviposition, overwintering, Lanugo retentor, Megalopyge opercularis 3579.
- Lymphocyta*,**
proliferation, immunoglobulin E response, hypersensitivity (immediate), man, Dermatophagoides farinae 6055.
- Lynxacarus radovskyi*,**
case reports, infestation, Felis domestica, USA, Florida 2922.
- Lysiaea clerkei*,**
photoperiod, effects on polymorphism, seasonal variations, Japan 5236.
polymorphism, diapause, coloration, photoperiod, seasonal variations 2773.
- Lymnaea manipurensis*,**
new species, taxonomy, morphology, India 7160.
- Lyroda subita*,**
nesting behavior, habitat, oviposition 5845.
- Lyphibius testaceipes*,**
parasites, Aphis nerii, USA, California 1276.
- Lyals*,**
embryo cells, antibodies effects on, Drosophila 368.
Entomophora egressa, Paracymus caudatus, Euglena gracilis, hemolymph, larvae, *Isotoma fumeraria* 5026.
- Lysozymes*,**
aging, pigments, fluorescence, Spodoptera eridania 4240.
- Lysozyme*,**
enzymatic activity, Astigmatidae 1764.
- Lytta sayi*,**
parasites, hosts, larvae, Agapostemon virescens 6759.
- Lytta vesicatoria*,**
larvae, head, functional morphology 76.
- Macaca mulatta*,**
pathogens, Babesia microti *Macaca mulatta*, *Ixodes dammini* 635.
- Macdunnosa*,**
morphology, taxonomy, USA, Florida 3207.
- Macdunnosa brunnea*,**
new species, morphology, taxonomy, USA, Florida 3207.
- Macdunnosa alpiniana*,**
morphology, taxonomy 3207.
- Machaeranthera canescens*,**
ecological distribution, environmental impact, herbivores, Hesperotettix viridis, USA, New Mexico 2063.
- Machilontus lawrencei*,**
new species, taxonomy, morphology, collections 7242.
- Machilery*,**
catching methods, rapid suction method, Coleoptera 7247.
- Machoeila*,**
new species, Greece 7142.
- Macroneilicoccus*,**
pest outbreaks, damage, Gossypium, India 7733.
- Macqueens*,**
taxonomy, morphology, New South Wales 3222.
- Macracanthorhynchus hirudinaceus*,**
infection, hosts, Dorytheneus paradoxus, China, People's Rep., Liaoning Province 5289.
- Macrocentrus*,**
new records, parasitism, Elasmopalpus lignosellus, USA, Texas 3577.
- Macrocentrus grandis*,**
embryogenesis, temperature effects, host-parasite interactions, instars, *Ostrinia nubilalis* 3489.
introduced species, population status, parasites, *Ostrinia nubilalis*, USA, Connecticut 8398.
parasites, biological control, *Ostrinia nubilalis*, USA, Delaware 2033.
parasites, effects on population levels, *Ostrinia nubilalis* 5356.
parasitism, association, infection, *Nosema pyrausta*, *Ostrinia nubilalis* 6039.
population decline, introduced species, parasitoids, *Ostrinia nubilalis*, USA, Iowa 6008.
- Macrocheles*,**
parasites, vectors, pathogens, Metarhizium anisopliae, *Hylobius pales* 4207.
vectors, disease transmission, Metarhizium anisopliae, *Hylobius pales* 6047.
- Macrocheles glaber*,**
predators, developmental stages, mortality, Musca vetustissima, Australia 2880.
- Macrocheles muscadomesticae*,**
infestation, effects on sexual behavior, longevity, Dermatobia hominis 5086.
- Macrocheletius subpinosus*,**
pest control, traps, aromatic compounds, attractancy 8487.
- Macroglomus*,**
compound eyes, ultrastructure 7294.
- Macroleon quinqueaculatus*,**
feeding behavior, efficiency, food organisms, pheideole 2804.
predators, food consumption, energy intake, foraging behavior 8296.
- Macrolepidoptera*,**
check lists, species composition, Hungary, S. Transdanubia 8681.
new records, geographical distribution, rare species, Sweden 7086.
species richness, herbivores, seasonal variations, larvae, Finland 4327.
surveys, species composition, Yugoslavia 3936.
- Macronalithus*,**
taxonomic revision, Brazil 7941.
- Macronalithus belemensis*,**
new species, taxonomy, morphology, Brazil 7941.
- Macronalithus brasiliensis*,**
taxonomic revision, Brazil 7941.
- Macromecoides aculeatus*,**
association, effects on ecological distribution, *Catulaeus guineensis*, Ghana 578.
- Macrophomina phaseolina*,**
detection, *Cylindrocapsa adpersus* infestation, *Helianthus annuus* 8338.
- Macrophylites*,**
species richness, freshwater environments, species composition, Coleoptera, Hemiptera, British Isles, Norfolk Breckland 6234.
- Macroplea mutica*,**
respiratory organs, morphology, larvae 6537.
- Macropsinae*,**
taxonomy, morphology, new species, India 4861.
- Macropsini*,**
taxonomy, morphology, new taxa 3212.
- Macropteris*,**
temperature effects on, *Pyrrhocoris apterus* 7465.
- Macrosiphum albidum*,**
pest outbreaks, infestation, host plants, *Lupinus*, British Isles, England, Kew Gardens 7744.
- Macrosiphum avenae*,**
disease transmission, barley yellow dwarf virus 8468.
vectors, maize dwarf mosaic virus transmission 3806.
viruses transmission 4195.
- Macrosiphum euphorbiae*,**
disease transmission, potato spindle tuber viroid 3704.
embryos, monitoring, population dynamics 3873.
feeding behavior, potato virus-Y transmission, temperature effects on 7699.
host plants, potato leaf roll virus disease transmission, *Myzus persicae*, *Physalis floriadana* 3395.
occurrence, population dynamics, sampling methods, crop fields, USA, California 9349.
pest control, chemosterilants 4575.
pests, Brassica oleracea, USA, California 4608.
population status, crop fields, British Isles 6927.
vectors, maize dwarf mosaic virus transmission 3806.
vectors, yellows, *Beta vulgaris*, Tasmania 6097.
- Macrosiphum indicum*,**
chromosome number 2321.
- Macrosiphum miscanthi avenae*,**
infectivity, barley yellow leaf virus, seasonal variations, Australia, Victoria 2618.
- Macrosiphum pachysiphum*,**
chromosome number 2321.
- Macrosiphum pumilus*,**
pests, ornamental plants, population dynamics 4530.
- Macrosiphum roseaeformis*,**
pests, ornamental plants, population dynamics 4530.
- Macrosteris fascifrons*,**
X disease transmission, infectivity 4191.
host preferences, population density, grasses 710.
infestation, cultivars, *Lantana*, pest control, aluminum mulches, abundance 2253.
sensilla, chemoreception, ultrastructure, role, feeding behavior 4362.
- Macroterribus polylicatae*,**
new species, taxonomy, morphology, USSR, UdSSR 4795.
- Macroteleia surfacti*,**
parasites, eggs, *Orchelimum fidicinum*, USA, Florida 5187.
- Macrotermes bellicosus*,**
fat body, ultrastructure, sexual dimorphism 4161.
- Macrotermes michaelseni*,**
castes, polymorphism, larvae 1708.
colonial characteristics, fungus gardens, foraging behavior, workers 2266.
colonial characteristics, polymorphism, developmental stages 435.
colonial characteristics, reproduction, castes, royal pair 8591.
effects on soil fertility, vegetation, semiarid environments, savannahs 5988.
feeding behavior, semiarid environments, colonies, Kenya 2004.
mounds, physical properties, chemical properties 747.
water intake, drinking behavior, castes 5918.
- Macrotermes subhyalinus*,**
fat body, ultrastructure, sexual dimorphism 4161.
food organisms, colonies, predation, *Megaponera foetens* 2109.
mounds, physical properties, chemical properties 747.
ovary, mitochondria inhibition, dipterans, *Rabdosia* 2556.
- Macrotermittinae*,**
colonial characteristics, symbionts inoculation, *Termitomyces* 2809.
enzymes activity, measuring techniques, ethylene production, fungus gardens 6215.
food organisms, colonies, predation, *Megaponera foetens* 2109.
- Macrotermis*,**
morphology, taxonomy, Kenya 1602.
- Maculinea arion*,**
population decline, extinction, British Isles 2117.
- Madagascar*,**
Damasca, morphology, taxonomy 3209.
new species, taxonomy, morphology, *Anthrribidae* 7942.
taxonomy, morphology, keys, *Crepidura* 4797.
taxonomy, morphology, *Oethretinae* 843.
- Magasaella corticaria*,**
new species, taxonomy, morphology, Hong Kong 7181.
- Magiciada*,**
eggs, survival, staining 2702.
nymphs, infestation, effects on growth, *Malus* 6126.
occurrence, Coniferales plantations, survival 6161.
- Magiciada septendecim*,**
abundance, distribution, USA, Connecticut 8376.
aggregation, population density, emergence 2154.
breeding success, population density, predation 5983.

- Magickada septendecim**, (continued)
life cycle, population dynamics 8401.
- Magnesia**,
food intake, effects on development, reproductive systems, larvae, *Scotia segetum* 7442.
- Magnesium**,
ion exchange, distribution, digestive tract, *Aceridae* 239.
- Magnesium sulfate**,
tolerance, ecological distribution effects on, saline environments, *Aedes taeniorhynchus*, *Aedes dorsalis* 8101.
- Magnetic fields**,
effects on mutation, fecundity, continuous culture, *Hesperocimex* 7493
orientation, flight, *Noctua pronuba* 8262
orientation, geotaxis, *Apis mellifica* 3537
receptors, orientation, communication, *Apis mellifica* 3302.
- Magnism**,
neurochemistry, anterior median eye, sensitivity, illumination, *Menemerus confusus* 5667.
- Mahonia reticulata**,
host plants, fossils, miocene, leaf miners 4751.
- Maintenance**,
storage, queens, *Apis mellifica* 8547.
- Maire defunctoid**,
new species, taxonomy, India 4001.
- Maize dwarf mosaic virus**,
transmission, vectors, *Aphididae* 3806.
- Maize sterile stunt virus**,
disease transmission, vectors, *Peregrinus maidis*, *Sogatella kolophon*, *Sogatella longifurcata* 7646.
- Maize stripe virus**,
disease transmission, *Peregrinus maidis*, *Zea mays* 8455.
- Makisterone A**,
effects on cuticle synthesis, vitellogenesis inhibition, *Oncopeltus fasciatus* 3487
effects on reproduction, development, *Glossina morsitans* 355.
- Malaculidae**,
47 new species, taxonomy, morphology, Asia, Himalayan Mts. 7944.
- Malacopicta striata**,
new records, parasites, *Picicola striata*, new species 4899.
- Malacosoma americanum**,
activity patterns, colonies, larvae 5142.
colonial characteristics, polymorphism, behavior, activity patterns, larvae 9359.
eggs, mortality, parasitoids infection 8314.
flight activity, energetics, thermoregulation 891.
flight, energetics, thermoregulation 6524.
- Malacosoma californicum pluviale**,
pest control, chemical control, population dynamics effects on, models 1450.
- Malacosoma distria**,
octopamine effects on adenylate cyclase activity, hemolymph 8976.
sex pheromone, chemical composition 223.
- Malacosoma indica**,
pest control, chemical control, insecticides, larvae, India 1449
pests, parasites, natural enemies, India 6768.
- Malacosoma neustria**,
hosts, parasites life cycle, *Pleistophora schubergi neustriae* 8124.
- Malaneta locustae**,
parasites, chemical control, sulphonamides, *Acridae* 1002.
- Malaria**,
disease control, genetic variance, *Anopheles culicifacies*, Sri Lanka 9430
disease control, human impact, roads, Brazil, Amazonas 8421
disease control, inhibition, fertilization, gametes, *Plasmodium gallinaceum* 4483
disease transmission, *Anopheles*, Pakistan 2911
disease transmission, chemical control effects on, *Anopheles stephensi* 663
disease transmission, population dynamics, *Anopheles arabiensis*, Senegal, Pikine 9239.
disease transmission, population genetics, *Plasmodium* susceptibility, *Anopheles* 7629.
epidemiology, vectors, *Anopheles darlingi*, Brazil, Amazonas 5271.
inherited diseases, man, *Anopheles*, Europe 4487.
transmission, susceptibility, *Culicidae*, USA, Florida 1320
transmission, vectors, chemical control, *Anopheles darlingi*, French Guiana 636.
vectors, biological control, parasites, *Romanosigma culicivora*, *Anopheles albanicus*, El Salvador 7645.
vectors, control programs, reviews, *Culicidae* 8409.
vectors, disease control, pesticide resistance, reviews 644.
vectors, disease control, research programs, *Anopheles* 9267.
vectors, effects of man, *Anopheles arabiensis*, Niger 628.
vectors, feeding behavior, blood meals, *Anopheles dirus* 6063.
vectors, pesticide resistance, *Anopheles*, USSR 9438.
vectors, population dynamics, *Anopheles aequalis*, French Guiana 3689.
- Male dehydrogenase**,
enzyme polymorphism, relationship chromosomes polymorphism, linkage selection, *Drosophila subobscura* 9394.
flight muscle, *Leptinotarsa decemlineata* 3315.
genotypes, comparison, Africanized honey bee, *Apis mellifica* adansonii 7062.
isozymes, eggs, *Apis mellifica* 2563.
- Male dehydrogenase (decarboxylating)**,
flight muscle, *Leptinotarsa decemlineata* 3315.
- Male dehydrogenase (oxalacetate-decarboxylating)**,
kinetics, muscles, *Catharus* 5689.
- Malathion**,
chemical control, *Ceratitis capitata*, USA, California 713.
chemical control, *Phlebotomus*, rain forests, Panama 1831.
effects on, diapause induction, *Tetranychus urticae* 1095.
insecticides, acaricides, efficacy, *Tetranychus telarius* 7794.
insecticides, acaroids, chemical control, *Anopheles quadrimaculatus*, *Culex quinquefasciatus* 6093.
insecticides, dusts, efficacy, *Amarca biguttula biguttula* 7749.
insecticides, storage, efficacy, *Callosobruchus maculatus*, *Callosobruchus chinensis* 7686.
insecticides, toxicity, *Anthonomus grandis* 9026
insecticides, toxicity, *Sitophilus granarius* 5769.
insecticides, toxicity testing, *Culex pipiens pipiens* 3438.
insecticides, weathering, effects on efficacy, *Epilachna vigintioctopunctata* 7712.
- Malathion**, (continued)
pest control, *Anopheles pulcherrimus*, *Anopheles hyrcanus*, Afghanistan 9241.
pest control, crop fields, *Cucurbita*, *Dacus cucurbitae* 7788.
pest control, stored products, *Insecta* 2190.
pesticide resistance, effects on fecundity, breeding success, *Sitophilus oryzae* 5043.
pesticide resistance, genetic factors, *Anopheles culicifacies* 1047.
pesticide resistance, genetic variance, strains, *Tribolium castaneum* 7394.
pesticide resistance, heritability, *Plodia interpunctella* 1560.
pesticide resistance inheritance, *Anopheles stephensi* 304.
pesticide resistance, migrations effects on, *Culex pipiens* 319.
pesticide resistance, population genetics, *Epilachna sparsa* 5498.
pesticide resistance, selection, *Drosophila melanogaster* 7868.
pesticide resistance, selection, *Epilachna sparsa* 2963.
pesticides (organophosphorus), pesticide resistance, synergism, *Tetranychus kanzawai* 3449.
pesticides (organophosphorus), sensitivity, larvae, *Culex pipiens*, *Culex hortensis*, *Theobaldia longaeolata* 8192.
susceptibility, pesticide resistance, temperature effects, *Oryzophilus surinamensis* 1058.
synergism, kumiai, *Nephrotettix cinctipes* 3434.
toxicity, chemical control, larvae, *Culex pipiens* 1038.
toxicity, *Coleophora laricella* 5782.
- Malawi**,
collections, identification, taxonomy, status, *Insecta* 3174.
new species, taxonomy, morphology, *Vandex dudleyi* 5564.
pest control, stored products, grains, *Insecta* 6968.
- Malaysia**,
collections, Natural History Museum of Geneva, species composition, Mantispinae, *Platymantispinae* 7883.
dengue virus, disease transmission, vectors, *Aedes albopictus* 4502.
epidemiology, socio-economic aspects, man, *Pediculus humanus* 657.
flight activity, periodicity, *Lepidoptera* 7514.
medical importance, parasites vectors, *Armigeres subulbatus*, *Cardiophila*, *Dirofilaria immitis* 6057.
new species, taxonomy, *Jenkinsheila setisforceps* 3200.
new species, taxonomy, morphology, *Gonatocerus surawakensis*, *Polynema robusta* 4037.
new species, taxonomy, morphology, *Teinocoptes pahangensis*, *Teinocoptes conycteris* 8726.
pesticide resistance, insecticides, enzymes activity, *Musca domestica* 5774.
predators, life history, *Andrallus spinidens* 4332.
species composition, abundance, habitat, *Coleoptera* 3950.
stored products, pests, community composition, *Manihot esculenta* 5386.
surveys, breeding sites, septic tanks, *Aedes*, *Culex*, *Armigeres*, *Uranotaenia* 9261.
weed control, parasites, *Cordia carussavica*, *Metrogaula obscura*, *Eurytoma attiva* 2960.
- Manitoba**,
toxicity, pest control, *Sitophilus granarius* 9297.
- Male sterility**,
biological control, pest control, population density, models 714.
biological control, population dynamics, mathematical models, *Insecta* 2943.
competitiveness, statistical Analysis, variance, *Insecta* 2480.
control programs, disease transmission, African trypanosomiasis, *Glossina*, Upper Volta 1345.
- Mallesagromyza phaeocollis**,
damage, crops, *Pisum*, India 9336.
- Malephora crocea**,
pollen, diets, effects on population growth, fecundity, *Amblyseius hibisci* 7572.
- Males**,
accessory gland, juvenile hormones biosynthesis, *Hyalophora cecropia* 968.
acidic patterns, pheromones effects on, interspecific relationships, *Dicoryphus japonica*, *Philosmia cythia* 2761.
aedeagus, glands, anatomy, histology, secretion, *Tenebrio molitor* 4181.
age effects on chromosomes recombination, *Drosophila ananassae* 5463.
aggregation behavior, territorial behavior, *Cuterebra lepvora*, USA, California 582.
aggregation pheromone, mating behavior, *Rhyzopertha dominica* 1931.
allometry, body size, wings, *Anisoptera* 3261.
Amblycorypha parvipennis, social organization, spatial distribution, singing sites, aggregation behavior, population density 2286.
anatomy, coloration, abdomen, wings, *Megapodagrionidae*, *Chlorocyphidae* 3362.
attractancy, sex pheromone, chemical composition, (E)-10-hexadecenal, *Dichocrois punctiferalis* 7341.
attractants, chemical composition, sex pheromone, *Euxoa auxiliaris* 698.
body size, sexual reproduction, selection, *Lepidoptera* 4326.
breeding success, genetic variance, *Drosophila melanogaster*, *Drosophila pseudoobscura* 3125.
breeding success, resource availability, oviposition, population density, *Scatophaga stercoraria* 6857.
chemosensitization, mating behavior, competition, genetics, *Anopheles culicifacies* 1902.
chemotaxis, sex pheromone, orienting response, *Periplaneta americana* 2760.
competition, adaptations, morphology, competitive behavior, *Podischnus agenor* 4423.
competition, mating behavior, *Caloptera* discrepancies 1911.
competition, sterile-release, population dynamics, mathematical models 6077.
competition, sterile-release, sexual reproduction, *Anthonomus grandis* 8541.
copulation duration, γ -radiation effects on, *Lymantria dispar* 373.
courtship, stridulation, calling behavior, *Ligyrodontus diffusus* 1904.
crowding, effects on sex pheromone, attractancy, *Acanthoscelides obtectus* 5091.
differentiation, diets effects on, *Scaptotrigona postica* 7001.
eggs, development, temperature effects, *Apis mellifica* 1878.
eggs, oviposition, host preferences, *Coccophagus coveperi* 2732.
evolution, natural selection, predation, sexual reproduction, *Insecta* 4698.
factors affecting abundance, colonial characteristics, *Myrmica* 2273.
feeding, survival, resource allocation, *Rhopalosiphum* pidi 5919.
flight activity, sex pheromone components effects on, *Trichoplusia ni* 419.
flight activity, sex pheromone components effects on, *Trichoplusia ni* 927.
foraging behavior, activity patterns, *Plebeia dryorana* 9362.
genitalia, morphology, *Blattella* 804.
genitalia, morphology, *Encicospilus americanus*, *Encicospilus flavoscutellatus* 8888.
genitalia, morphology, *Harpagophallia* 5061.
genitalia, morphology, *Holcostethus hirtus* 4941.
genitalia, morphology, *Holcostethus hirtus* 5809.

Males, (continued)

- genitalia morphology, *Hypsipyla robusta* 90.
genitalia, morphology, *Nemobrentus aeneipennis*, *Nemobrentus melzeri* 8755.
genitalia, morphology, *Plusia nausitima*, Sweden, Upland 4714.
genitalia, morphology, *Protodryinus punctatus* 6480.
genitalia, morphology, *Saidula laticollis* 6414.
genitalia, muscles, anatomy, *Tortricinae* 8903.
geographical distribution, behavior, *Tabanidae*, France 9113.
groups, effects on attractancy, sex pheromone, *Acanthoscelus obiectus* 3544.
habitation, odors, nestmates, *Lasiosomus xanthopyrum* 9075.
haircells, sex pheromone, biochemical analysis, *Grapholita molesta* 3349.
haunching sequence, sex differences, *Lymantria dispar* 5807.
homosexual behavior, body weight effects on, *Palmacoris nana* 1892.
hypopygium circumvolutum anatomy, *Condylostylus omeiaticus* 9035.
juveniles, photoperiods, effects on, fertility, *Angasta kuetana* 1880.
karyotypes, meiosis, *Berdeniella*, *Satchellia opaca*, *Tonnoiriella pulchra* 2329.
keys, *Alenates* 2435.
longevity, diploidy, haploidy, workers, *Melipona opacifasciata* 9032.
mating behavior, fecundity, competition, radiation effects on, *Culex tarsalis* 1125.
mating behavior, females attractancy, age, *Tenebrio molitor* 7488.
mating behavior, sex pheromone effects on, *Bradysia imbricatus* 416.
mating behavior, sex pheromone effects on, *Glossina palpalis* 213.
mating behavior, silk role, *Carthouss xanthogramma* 4294.
mating behavior, sperm displacement, *Bursa copulatrix*, *Desis vigiles* 8248.
meiosis, *Monochamus scutellatus* 1895.
meiosis pairing, gene mapping, rRNA genes, heterochromatin, *Drosophila melanogaster* 8636.
methylthioethanesulfonate, dimethylnitrosamine, effects on chromosomes, lesions, *Drosophila melanogaster* 6264.
morphology, *Culicoides florentia*, Colombia 812.
morphology, *Nomada podagrica* 4033.
morphology, *Paktonogus distinctus*, Thailand 5550.
morphology, reproductive organs, phylogeny, *Formicidae* 3456.
morphology, *Rhinoseius braziliensis*, Brazil 6502.
morphology, taxonomy, *Acleridae* 6424.
nesting behavior, territorial behavior, *Oryzylus sericeus* 1968.
occurrence, life cycle, *Megastigmus pictus*, Poland 9110.
Pectinophora gossypiella, design, efficiency, pheromone traps 2477.
pest control, synthetic sex pheromone, *Cydia nigricana* 696.
pheromones, behavior response, threshold limits, *Grapholita molesta* 420.
photoperiods, effects on, calling behavior, pheromones, oviposition, females, *Trichoplusia* n. 1881.
polymorphism, developmental stages, *Polystomophora ostiapurima* 2500.
population structure, colonial characteristics, workers, queens, *Bombus perplexus* 9366.
production, colonial characteristics, *Myrmica rubra* 2277.
protein biosynthesis, vitellogenin, molting hormones, 20-hydroxy-ecdysone, *Sarcophaga bullata* 3367.
recombination factors, characterization, *Drosophila melanogaster* 2315.
reproduction fitness, temperature, carboxylester hydrolase, alleles, *Drosophila melanogaster* 7474.
reproductive behavior, sex pheromone effects on, *Sitotroga cerealella* 424.
reproductive behavior, spatial distribution, song, *Cystosoma saundersi* 2748.
sensilla morphology, phylogeny, *Chironomidae* 4966.
sex chromosomes, exchange, γ RNA genes, *Drosophila melanogaster* 3895.
sex determination, chromosomes, *Gerris*, *Limnoporus* 8637.
sex determination, genes, lethality, *Megoura vicia* 6252.
sex pheromone habituation, effects on mating behavior, *Pectinophora gossypiella* 426.
sex pheromone attractancy, habituation, *Trichoplusia* n. 2763.
sex pheromone, attraction, orientation, *Periplaneta americana* 4302.
sexual behavior response, age effects, *Brachymyia lasus* 2754.
sexual behavior, carbon dioxide effects on, *Musca domestica* 430.
sexual behavior, pheromones response, *Dorycteria amatella* 400.
sound production, aggregation behavior, movements, spatial distribution, *Neoconocephalus ensiger* 9361.
sound production (biological), auditory communication, *Zonocerus variegatus* 2615.
Spermatogenesis, mutagenesis, genes, fertility, *Drosophila melanogaster* 763.
social behavior, mating, competition, *Ephestia kuehniella* 8232.
swarming, sex ratio, *Belgica antarctica*, *Antarctica* 6016.
syntypes, morphology, genitalia, *Deroceras moqueyensis* 8043.
workers, evolution, social organization, *Hymenoptera* 3848.
- Malformations.**
appendages, *Epibremia*, *Plecoptera*, Sweden, Medelpad, Laxan R. 4656.
morphology, juvenile hormones effects on, population studies, *Eurygaster integriceps* 6648.
morphology, *Lasius pascuella* chelura 1721.
morphology, *Tachinus axillaris*, *Staphylinidae* 1719.
wings, venation, *Cispa*, India 6509.
- Mail.**
blood meals, hosts, *Glossina morsitans submorsitans*, *Glossina palpalis gambiensis* 9126.
pests, biology, behavior, *Saccharum officinale*, *Eldana saccharina* 2098.
resting behavior, habitat preferences, effects on pest control, *Glossina palpalis* 436.
surveys, mapping, geographical distribution, *Glossina* 1312.
- Mallophaga.**
abundance, parasites, *Phalacrocorax auritus*, USA, Florida 5948.
ectoparasites, birds, new records, USA, Alaska 520.
intestinal parasites, *Zenaidura macroura*, *Zenaidura asiatica*, USA, Florida 3582.
parasites, infestation, *Peromyscus maniculatus* 2831.
parasites, infestation, *Vanellus vanellus*, *Tringa totanus* 9143.
parasites, *Melanitta nigra*, *Melanitta deglandi*, *Melanitta perspicillata* 2833.
parasites, *Numenius americanus*, USA, New Mexico 3581.
parasites, public health 9263.
pesticide applications, spraying, livestock, *Sus scrofa* 8429.
- Mallophaga schwarzi.**
courtship, mating behavior, diets, Panama, Gamboa 6681.
- Mallos.**
social organization, territorial behavior, silk repellents 3839.
- Mallos regalis.**
social behavior, sanitation, excretory products distribution, webs structure 2143.
social organization, colonial characteristics, activity patterns 9354.
starvation survival, comparison, *Dictyna* 1212.
- Malonic acid.**
repellents, pest control, *Dysdercus koenigii* 7340.
- Malpighian tubules.**
antibiotics, nikkomycin, osmoregulation, *Epilachna varvetsi* 5713.
ATP pyrophosphatase activity, inhibitors effects on, *Locusta migratoria* 2572.
development, imaginal discs transplantation, *Galleria mellonella* 6632.
fluids transport, excretion, renal function, reviews, *Insecta* 8931.
histology, anatomy, larvae, *Papilio demoleus* 8930.
infection, parasites, *Gregarina hylobii*, *Ophryocystis hylobii*, *Hylobius abietis* 5726.
mitochondria, kynurenine 3-hydroxylase, activity, mutants, *Ephestia kuehniella* 6566.
mitochondria locomotion, 5-hydroxytryptamine effects on, *Rhodnius prolixus* 162.
morphology, histology, *Myiavris pusillata* 929.
parasites attachment, *Herpetomonas ampeliphila*, *Drosophila melanogaster* 3408.
permeability, *Musca domestica* 927.
secretion, environmental effects, hormones, stimulants, *Locusta* 2613.
ultrastructure, antibiotics, nikkomycin, effects on osmoregulation, *Epilachna varvetsi* 4175.
ultrastructure, functional morphology, *Pyrops candelaria* 163.
ultrastructure, segments, comparison, *Blattella germanica*, *Tenebrio molitor* 6548.
- Malpighian tubules.**
fluids excretion, canavanine effects on, *Locusta migratoria migratoria* 3370.
- Malta.**
new records, geographical distribution, *Zizeera knysna* 9468.
species composition, *Apidae* 7891.
- Maltese ls.**
geographical distribution, new records, *Staphylinidae* 4746.
- Malus.**
aromatic compounds, attractancy, pest control, *Rhagoletis pomonella* 8500.
fruits damage, cytology, pests, *Tetranychus medianellae* 5403.
host plants, host searching behavior, temperature effects on, *Cydia pomonella* 8277.
host plants, pest resistance, detection methodology, *Eriosoma lanigerum* 2962.
infestation, effects on growth, nymphs, *Magpica* 6126.
orchards, community structure, species composition, *Coccinellidae* 9190.
orchards, pest control, pesticide resistance, reviews, *Insecta* 7727.
orchards, pest outbreaks, leaves damage, *Phyllonorycta crataegella*, USA, Connecticut 304.
orchards, pests, integrated control, ecological evaluation, *Insecta* 7730.
orchards, pests, population dynamics, *Lathrolepis blancardella*, Switzerland 6918.
orchards, pests, predators efficiency, environmental factors, *Panonychus ulmi* 8398.
orchards, pests, predators efficiency, environmental factors, *Panonychus ulmi* susceptibility 6204.
- Malus domestica.**
attractants, pollination, *Apis mellifera* 5411.
host plants, pest resistance, clones, *Panonychus ulmi* 5312.
pest control, irrigation, temperature effects 1385.
stored products, pests, atmospheric conditions effects on 1395.
yield, feeding behavior effects on, *Apis mellifera* 1237.
- Malus pumila.**
cultivars, host plants susceptibility, pests, *Laspeyresia pomonella* 5313.
Laspeyresia pomonella damage, biological control, granulosus virus 8440.
orchards, pest control, integrated control, *Tetranychidae* 8517.
- Manestria brassicae.**
antifeedants, chloridormone, effects on feeding behavior 5383.
fat body cells, cell culture methodology 876.
hemolymph, hormones, ecdysteroids, molting, instars 7327.
hormones, melanization, coloration 3360.
nuclear polyhedrosis virus, growth, larvae 4618.
pest control, nuclear polyhedrosis virus, safety, public health 7717.
prothoracic glands, sensitivity, juvenile hormones 3387.
prothoracic glands, sensitivity, juvenile hormones 3391.
sex pheromone, biochemical composition 971.
susceptibility, nuclear polyhedrosis virus 2635.
toxicity, biochemical analysis, nuclear polyhedrosis virus, Europe 2617.
- Manestria configurata.**
biochemical analysis, central nervous system, identification, octopamine, methodology 3282.
diets, inoleic acid, nutrition 8079.
metamorphosis effects on brain, biochemistry, cyclic AMP 960.
pupae, taurine biosynthesis, metamorphosis 389.
- Manestria oleaceae.**
food plants, diets, Europe 9156.
- Manestria pumila.**
synonymy, taxonomy, *Graphana mutans* 3224.
- Manestria psi.**
sex pheromone, chemical composition 228.
- Manestria suavis.**
sex pheromone, chemical composition 6577.
- Mammalia.**
central nervous system, insecta neurotransmitters effects on 200.
hosts, chemotaxis, life cycle, development, population dynamics, *Simuliidae* 1190.
hosts, *Isodes mator*, Zimbabwe 519.
hosts, parasites, *Cheyletiidae*, *Cheyletiella* 92.
hosts, parasites, disease reservoirs, *Rhodnius pallescens*, Panama 667.
hosts, parasites distribution, *Arthropoda* 3585.
hosts, parasites infestation, seasonal variations, *Isodes trianguliceps*, Germany, Fed Rep 7547.
hosts, parasites, *Siphonaptera* 2037.
infestation resistance, *Ixodes* 2926.
nests, abundance, habitat preferences, *Collembola* 1179.
nests, population levels, species composition, *Collembola* 570.
parasites, check lists, *Arthropoda*, New Zealand 1231.
parasites, check lists, *Siphonaptera*, USA, Alaska 5530.
parasites, species composition, *Gamaisoidea*, Iran 7109.
Rocky Mountain spotted fever, vectors, hosts, *Acarina*, USA, California 1321.
- Man.**
allergens, histamine release, *Dermatophagoides farinae* 1372.
allergens, house dust, *Acari* 1371.
allergic diseases, *Arthropoda* 1374.
allergic diseases, house dust, therapy, symptoms, *Dermatophagoides pteronyssinus* 7634.
anaphylaxis, stings, immunotherapy, *Insecta* 7635.
asthma, immunotherapy, *Dermatophagoides farinae* 2174.

Man, (continued)

atopic dermatitis, hypersensitivity, Dermatophagoides farinae antigens 8405.
blood coagulation, venom effects on, *Loxosceles laeta* 8195
blood meals, biting, *Anopheles triannulus bachmanni*, Brazil 4354.
blood meals, feeding behavior, *Xenopsylla gergilli* minax, *Xenopsylla conformis* 9124
blood meals, species identification, enzymes, *Simulium damnosum* 7326.
case reports, contact dermatitis, *Thaumetopoea pityocampa* 3694.
case reports, hemolytic anemia, *Vespidae* stings 9331
case reports, insecticide, wounds, *Diptera* 7642.
case reports, Lyme disease, vectors, *Ixodes dammini*, USA, Minnesota 4492.
case reports, occurrence, *Boophilus decoloratus*, *Rhipicephalus evertsi* events.
South Africa 1367
case reports, scabies, association, herpes genitalis 3696
case reports, scabies, immunology, *Sarcoptes* 3691
case reports, sebaceous gland infestation, *Demodex brevis* 3663
contact dermatitis, case reports, *Coccinellidae* 3680
cultural characteristics, disease transmission, African trypanosomiasis, control programs, Glossina, Africa, East 1341
dengue, diagnosis, dengue virus, *Aedes albopictus* cell culture 9224
dengue, vectors, *Aedes albopictus* 9226
dengue virus, vectors, *Aedes albopictus*, Malaysia 4502
dermatitis, case reports, *Ornithonyssus bacoti* 1363
Dermatophagoides farinae, respiratory tract, seasonal variations, Dermatophagoides farinae 1323
edema, heart, case reports, stings, *Buthus* 9256
effects on, toxicology, stings, scorpions, Switzerland 658.
envenomation, toxicity, conferences 8706.
epidemiology, infestation, treatment, *Pediculidae* 2916
erythrocytes, hemagglutination, specificity, *Centurionus sculpturatus* 8438
food sources, amino acid composition, *Schistocerca gregaria* 1752
hosts, Chagas' disease, *Rhodnius pallescens*, Mammalia 667
hypersensitivity, bites, *Triatoma infestans*, *Dipetalogaster maxima* 1375
hypersensitivity (immediate), allergens, *Cladotanytarsus lewisi*, Sudan 1370
hypersensitivity (immediate), immunotherapy, venom, *Hymenoptera* 9254
hypersensitivity (immediate), lymphocytes, immunoglobulin E response, immunotherapy, Dermatophagoides farinae 6055
hypersensitivity (immediate), venom, immunotherapy, *Hymenoptera* 1700
hypersensitivity (immediate), venom, immunotherapy, *Hymenoptera* 4484
hypersensitivity, immunotherapy, antigens, *Triatoma protracta* 4522
hypersensitivity, immunotherapy, *Triatoma protracta* 4521
hypersensitivity, *Lymantria dispar* 9235
hypersensitivity, stings, *Hymenoptera* 1324
hypersensitivity, treatment, oral administration, Dermatophagoides pteronyssinus sensitization 8434
hypersensitization, Apis venom hypersensitivity (immediate) 6053
immune response (cell-mediated), hypersensitivity, stings, *Hymenoptera* 3644.
immune response, neurological complications, new records, bites, *Ixodidae* 8511.
immune response, venom, *Hymenoptera* 1325.
immune response, venom, toxins, reviews, *Arthropoda* 5764.
immunity, antibody response, *Ixodidae* 3701
immunotherapy, venom, sensitivity, case reports, *Insecta* 3686.
imported diseases, case reports, disease transmission, *Rhipicephalus sanguineus*, exanthematous typhus 1332.
imported diseases, malaria, *Anopheles*, Europe 4487.
infants, sepsis, case reports, infestation, *Drosophila* 4500.
infection, diagnosis methodology, *Arthropoda* 9222
infection, effects on immunoglobulins, *Sarcoptes scabiei* 8404
infection, Spirochetosis, disease transmission, *Argasidae* 9245.
infectious diseases, development, Norwegian scabies, *Acari* 3659
infestation, case reports, *Culex* 4507
infestation, treatment, carbaryl, *Adiposus humanus capitis* 3665.
leishmaniasis, disease transmission, epidemiology, *Lutzomyia umbratilis*, Guyana 9237.
malaria, disease transmission, population dynamics, *Anopheles* *arabensis*, Senegal, Pikine 9239.
medical importance, bites, stings, *Arthropoda*, USA, Georgia, Ft. Stewart 6886.
medical importance, economic importance, stings, *Solenopsis* 6893.
maculotaneous lymph node syndrome, role, Dermatophagoides pteronyssinus antigens 8435.
odynophagia, dysphagia, stings, *Vespidae* 8177.
parasites, identification methodology, *Insecta*, *Arachnida* 8423.
parasites, infestation, larvae, *Amblyomma americanum* 8431.
parasites, life history, *Sarcoptes scabiei* 666.
pests bites, *Leptocnops torrens*, USA, California 8430
poisoning, venom, *Araneae*, *Scorpiones*, *Hypodermatidae* 8183.
population studies, hypersensitivity, *Apidae* venom, Australia 9266.
priapism induction, venom, *Lactrodectus mactans* 7395.
salmonellosis, vectors, urban environment, *Insecta* 6885.
scabies, case reports, symptoms, histology 2185.
scabies, hypersensitivity (immediate), immunoglobulin E 4485
Scorpiones venom envenomation, case surveys, Tunisia 8417.
sensitivity, toxicity, venom, reviews, *Apidae* 6616.
sensitivity, venom, *Hymenoptera* 3677.
skin diseases, infestation, *Proctolaelaps pygmaeus*, New Zealand 2171
skin diseases, infestation, therapy, *Arthropoda* 8412.
skin diseases, medical importance, *Sarcoptes scabiei* 2932.
skin, toxins, venom proteinase activity effects on, *Euproctis subflava*, *Euproctis chrysorrhoa* 8178
socio-economic aspects, epidemiology, *Pediculus humanus*, Malaysia 657.
strike, *Parasarcophaga ruficornis*, Thailand 4499.
toxic shock syndrome, association, stings, *Hymenoptera*, *Staphylococcus aureus* 8416.
treatment, hypersensitization, stings, *Hymenoptera* 2931.
trypanosomiasis, disease transmission, epidemiology, Glossina, Ivory Coast 9240.
trypanosomiasis, disease transmission, Glossina fuscipes fuscipes, Congo, People's Rep. 9243.
venom, stings, immunoglobulin E, *Hymenoptera* 3699.

Management, (continued)

apiculture, methodology, *Apis mellifera* 7705.
colonies, apiculture, *Apis mellifera* 1433.
effects on species diversity, hedgerow, *Arthropoda*, British Isles 7618
grasslands, effects on abundance, *Auchenorhynchus* 5245.
grasslands, effects on community composition, abundance, *Arthropoda* 5234
pest control, control programs, computer applications, microprocessor software system 8564.

Management, (continued)

pests, integrated control, *Dendroctonus frontalis* 9329.
Mandelic acid,
esters, *Tribolium confusum* repellents, chemical analysis 222.
Mandibles,
functional morphology, feeding behavior, larvae, *Cucujus clavipes*, *Dendrodes canadensis*, *Pytho depressus* 4357.
Mandibular gland,
secretions, chemical composition, age effects on, *Trigona griseola* 8117.
Mandibular glands,
pheromones, biochemical analysis, *Andrena haemorrhoa* 3351.
pheromones, olfactory communication, *Myrmica* 5867.
secretion cells, ultrastructure, workers, *Apis mellifera* 4951.
secretions, chemical composition, *Apis mellifera* 242.
secretions, o-aminocatecholphenone, phylogeny, *Mycocepurus goeldii* 2608.
Manduca,
embryogenesis, epithelium, invaginations 3457.
Manduca quinquemaculata,
oviposition, site selection, host plants, *Lycopersicon esculentum* 2081.
Manduca sexta,
γ-aminobutyric acid effects on neurophysiology, *Bombyx* 4152.
biological control, toxicity, *Bacillus thuringiensis*, *Haciurus* 4186.
L-canavanine effects on arginine catabolism 1763.
cell membranes, ions transport, enzymatic activity, particles, *Portosoma* 3324.
chemical composition, pigments 1790.
chemical control, pest control 3763.
compactin, inhibition, hydroxymethylglutaryl-CoA reductase (NADPH), protein biosynthesis, juvenile hormones 6558.
cuticle molting, hormones interaction effects on 3493.
development, flight muscles, neuromuscular junctions, structures 8910.
development, hosts, parasitoids effects on, *Apanteles smerinhi* 8328.
embryos, cell surface membranes, adenosinetriphosphatase hydrolysis β-(2-furyl) acetyl phosphate 4949.
embryos, protein biosynthesis, mRNA translation 3887.
embryos, ultrastructure, gap junctions, septate junctions 3462.
enzymes activity, phosphorylation, 3-hydroxy-3-methylglutaryl coenzyme A reductase 6562.
hemolymph, larvae, pupae, chemical composition 2576.
hormones, assays, ecdysone synthesis, neurosecretion cells 3343.
hormones, purification, characterization 2588.
host plants defense mechanisms, effects on midgut epithelium 4391.
host plants, pest resistance, photoperiod, light intensity effect on, *Lycopersicon hirsutum* 9340.
hosts, parasitoids emergence, juvenile hormones effects on, *Apanteles congregatus* 5935.
insulin-like peptides, purification, hemolymph 5685.
juvenile hormones, biosynthesis, inhibition, bisthiolcarbamate juvenoid 5714.
juvenile hormones synthesis, corpora allata, development 5826.
larvae, cuticle, morphogenesis, growth 3518.
larvae diapause, photoperiods effects on 3518.
larvae, metamorphosis, molting, juvenile hormones, enzymatic activity 3500.
larvae, midgut, histology 188.
metamorphosis, molting, hormones, developmental stages 967.
molting, eclosion hormone role, activity patterns 7431.
molting, enzymatic activity, chitinase 1766.
molting, metamorphosis, physiology effects on 3517.
muscles, electrical properties 2518.
salivary gland secretion, proteins, ecdysone effects on 2610.
superfumerary molting, diets effects on 1107.
thorax, exoskeleton, muscles, morphology 8064.
water balance, metamorphosis, pupation 7353.
Mangifera indica,
pests, biometrics, *Chlumetia transversa*, India, Uttar Pradesh 6121.
trees, pest control, barriers *Alophia* bands, *Drosicha mangiferae* 7748.
trees, pest control, barriers, *Drosicha mangiferae* 7754.
Mangrove swamps,
abundance, seasonal variations, *Culicoides*, USA, Florida 4419.
defoliation, infestation, *Avicennia alba*, *Cleora injectaria*, Thailand 2853.
Manihot esculenta,
cassava mosaic virus, vectors, *Bemisia tabaci* 7653.
crop fields, infestation, *Isoptera*, Brazil, Para State 4597.
crop fields, pests, species composition, *Insecta*, *Acari*, USA, Florida 4555.
entomofauna, check lists, *Insecta* 4528.
host plants, pests, infestation, *Mononychellus caribbeanae* 1428.
stored products, pests, community composition, Malaysia 5386.
Manihot esculenta,
pests, check lists, *Manihot esculenta*, India 4620.
Manikara bahamensis,
host plants, feeding behavior, new species, *Dichrorampha manikara*, USA, Florida 1660
Manikara zapota,
host plants, feeding behavior, new species, *Dichrorampha sapodilla*, USA, Florida 1660
Maniola jurtina splendida,
types, morphology 8889.
Mansonella ozzardi,
parasites, transmission, vectors, *Culicoides variipennis* 3399.
parasites, vectors, *Culicoides furens*, Haiti 656.
vectors, *Culicoides furens*, *Culicoides barbosai*, Haiti 4516.
Mansonellosis,
disease transmission, vectors, *Culicoides furens*, *Culicoides barbosai*, Haiti 4516.
Mansonia,
visual evoked response, visual stimuli, avoidance behavior, hosts, attractants 1919
Mansonia africana,
disease transmission, Chikungunya virus 1380.
Mansonia annulata,
disease transmission, *Brugia malayi* vectors, Indonesia, Bengkulu 6062.
Mansonia bonnensis,
disease transmission, *Brugia malayi* vectors, Indonesia, Bengkulu 6062.
Mansonia crassipes,
enzymes, electrophoresis, population studies 5691
phosphoglucosyltransferase, genes, polymorphism 7872.
Mansonia dives,
disease transmission, *Brugia malayi* vectors, Indonesia, Bengkulu 6062.

- Mansonella richiardii**, blood meals, development, reproductive systems 9058
- Mansonella uniformis**, disease transmission, Brugia malayi vectors, Indonesia, Bengkulu 6062. enzymes, electrophoresis, population studies 5691. phosphoglucomutase, genes, polymorphism 7872
- Mansonella uniformis**, disease reservoirs, geographical distribution, Australia, Ord R. 671.
- Mantopha uhleri**, parasitism, effects on hosts, development, Lycosa rabida 4369.
- Mantispinae**, species composition, collections, Natural History Museum of Geneva, Europe, Africa, South America, Malaysia 7883.
- Manure**, availability, fecundity, population density, Onthophagus gazella 5997. breeding, eggs survival, Cochliomyia hominivorax 6037. degradation, adults body size effects on, Onthophagus gazella 2897.
- Maoriidamesa harrisii**, life history, Austrocladius, life history, New Zealand, Waitakere R. 451.
- Mapping**, chromosomes, salivary gland, chrysomyia megacephala 1501. computers, epidemiology, disease control, onchocerciasis, Africa, Volta R. Basin 6068. damage, pest control, Dendroctonus frontalis, USA, Texas 9317. methodology, nervous system, cobalt, Schistocerca gregaria 8844. modification genes, chromosomes, Drosophila subobscura 3060. pests, monitoring methodology, Psorophora columbiae, USA, Louisiana 5397. restriction endonuclease, chorion genes organization, Drosophila 5454. restriction endonuclease, introns, rRNA genes, nucleolus organizer region, Drosophila hydei 4664. restriction endonuclease, mitochondria DNA, Drosophila melanogaster, Drosophila virilis 3875. restriction endonuclease, satellite DNA, Drosophila nasutoides 4665. surveys, geographical distribution, Glossina, Mali 1312.
- Maramba bilinealis**, synonymy, new species, Maramba patnalis, Southeast Asia 842.
- Maramba patnalis**, new species, taxonomy, morphology, Southeast Asia 842.
- Maramba ruralis**, synonymy, new species, Maramba patnalis, Southeast Asia 842.
- Marganallana**, taxonomic revision, new genera 2444.
- Margaredia demetrii**, new genera, new species, Ivory Coast 1791.
- Margaronia indica**, larvae, pathogenicity, Paeclomyces farinosus 1001.
- Maricetta javensis**, hyperparasitism, host preferences, oviposition, development, Microterys flavus 5184. methadation, toxicity 9020.
- Marliopteryx carancahua**, new species, new genera, taxonomy, USA, Texas 5604.
- Marine environment**, geographical distribution, new species, Agave verrucosa, Agave hirtellus 3966. herbivores, association, algae, Diptera, USA, California 3858
- Marinae organisms**, parasites, Iguanacarus 9.
- Markers**, coloration, population studies, mutants, competition, Pectinophora gossypiella 8364. development, juvenile hormones, enzymatic activity, Trichoplusia ni 2723. immunohistochemistry, central nervous system development, embryos, Drosophila 8913. lines, diapause eggs, protein composition, Bombyx mori 9420. oviposition, Callosobruchus maculatus, host selection, legumes 1899. oviposition, habitat preferences, host plants, Maruca testalis, Vigna unguiculata 8349. population dynamics, esterase inheritance, Anthonomus grandis grandis 8661.
- Market research**, economics, apiculture, pollen 2968
- Marking**, capture-recapture studies, mating behavior, Glossina morsitans 1141. capture-recapture studies, Melanargia galathea 6699. capture-recapture studies, methodology, survival, Henosepilachna virginiopectipunctata 3245. dyes, pigments, Culicoides varipennis 853. methodology, blood meals, radioisotopes, Phlebotomus 6469. methodology, european, population levels, Myrmica rubra, Myrmica scabrinodis, Lasius niger 6981. nuclear polyhedrosis virus, dispersal, survival, females, Hyphantria cunea 2858
- Marking behavior**, deposits, aggregation behavior, Izodes matozi, Zimbabwe 12. oviposition deterrents, intraspecific relationships, Rhagoletis basiola 1920
- Maripissa tigrina**, feeding behavior, food preferences, predators, Insecta 1208
- Marishes**, habitat, bionomics, Hydrochara soror 8281
- Maruca testalis**, instars, morphology, development 74. life history, reproductive behavior, oviposition habitat preferences 433. mass rearing, methodology 49. oviposition, habitat preferences, host plants, Vigna unguiculata 8349. pest resistance, host plants, screening, Vigna unguiculata 3721. phenology, infestation, Vigna unguiculata 2052
- Mauridae**, reproductive behavior, life history, South Africa 470
- Mascarene Is., Reunion I.**, new species, host plants, Chalcidoida 4877
- Mascarenes**, new genera, new species, As, Ilterylor, 8 species, Cerylonidae 4813. new species, new genera, Tropiduchidae 4864. new species, taxonomy, morphology, Tylana nigromaculata, Tylana rodriguensis 4866
- Mass rearing**, artificial diets, Lygus hesperus 8016. cages effects on development time, Drosophila melanogaster 385. cages, effects on oviposition, egg production, Anthonomus grandis grandis 4086
- Mass rearing, (continued)** cultivation, technical entomology, Insecta 7258. development, Anisochrysa carnea, 4250. dispersal, longevity, comparative studies, Dacus cucurbitae, 2768. eggs, Heliothis virescens 1457. eggs parasites, population density, Trichogramma pretiosum 4373. eggs-saline water, recycling, methodology, Anthonomus grandis 8854. eggs-separation techniques, Spodoptera frugiperda 2491. environmental conditions, growth, Antherea yamamai 9313. fecundity, egg production, Dacus cucurbitae, Japan 1850. methodology, Cordylobia anthropophaga 4515. methodology, dissection, Megachile rotundata 60. methodology, feeding, oviposition, Lygus hesperus 8023. methodology, feeding, Tropophloeus bilineatus 6477. methodology, laboratories, LasioGLOSSUM zephyrum 8862. methodology, leaves, Acan 2486. methodology, Lycitidae 858. methodology, Maruca testalis 49. methodology, measuring techniques, Ceratitis capitata 7252. methodology, Monomonium pharaonis 8864. methodology, parasites biological control, Filipevimerus leipandra, Diabrotica balteata 8494. methodology, parasites, Pales pavidus, Galleria mellonella 510. methodology, Simulium danneum 2484. methodology, Sitotroga cerealella 4091. methodology, Sogatella longiruficrura 2485. methodology, sterility, hybrids, Heliothis 3243. oviposition, artificial substrates, Pimpla instigator 2735. oviposition cages, Diatraea grandiosella 3240. parasites, biological control, Howardia hucana, Megastela halterata 3027. parasites, host preferences, effects on development, Bracon brevicornis 509. population levels estimation methodology, Drosophila melanogaster 2487. predators, methodology, Anthocoris nemorum 2259
- Mass spectroscopy**, chemical analysis venom, Paravespa vulgaris 248
- Massospora cicadettiae**, pathogens isolation, Cicada 6605
- Massospora pahariae**, pathogens isolation Cicada 6605
- Mastophora dizzydeani**, life history, predatory behavior: reproductive behavior 1949
- Mastoterms darwiniensis**, cellulase activity, digestive tract, salivary gland, Protosoa 5931
- Mate selection**, aggressive behavior, body size, sexual selection, Brenus anchorago 6658. behavioral genetics, Drosophila 6678. body size, breeding success, Tetraopes tetraopthalmus 4298. Chauliognathus pennsylvanicus, competition effects on: interspecific relationships, Vespadia 1142. conspecific recognition, Polistes fuscatus 6664. copulation, Pogonomyrmex californicus 8257. courtship, discrimination, age, body size, Pteris protodice 4297. courtship, females, Colias eurytheme Colias philodice 407. courtship, Phidippus femoratus 6663. genetics, strains, Tribolium castaneum 6275. mating behavior, Dacus dorsalis 2738. mating behavior, habitat, Eristalinus 8252. mating behavior, natural selection, Lepidoptera 4285. pairing, interspecific relationships, Odonata 3522. reproductive behavior, song, Cystonoma saundersii 2748. reproductive isolation, feeding types, Diachasma punctiferalis, Japan 1912. reproductive isolation, speciation, evolution, Drosophila melanogaster 3929.
- Materials**, breeding cages, Lepidoptera 5630. cages, Tetranychidae 6473. nests, rearing methodology, Megachile rotundata 4921.
- Maternal behavior**, brood care, eggs, females, Labidura riparia 7489. cocoons construction, Uloborus ferokus 6672. eggs, hygiene, effects on, Labidura riparia 1146. mother-offspring interactions, eggs, Labidura riparia 3521. mother-offspring interactions, feeding, nymphs, Perisphaerus 2746. nest building, body weight, fecundity, Sceliphron assimile 1905. predators, defensive behavior, Gargaphia solani 3563
- Maternal effects**, deficient mutant, embryogenesis, Drosophila 764. embryogenesis, oogenesis, biochemistry, reviews, Insecta 5837. inbreeding, fitness, drones, Apis mellifera carnica 4697
- Mathematical analysis**, dry weight, adults, pupae, Chironostoma fumiferana 7260
- Mathematics**, correlation analysis, body length, body weight, energy content, Palomena prasina 51.
- Mating**, age, effects on ovulation, larvae production, receptivity, Glossina pallidipes 2423. biological control, sex pheromone, air permeation technique, Spodoptera frugiperda, Heliothis zea 9346. biometrics, Holotrichia consanguinea 7520. Blumea eriantha oil vapors effects on, Earias vittella 7454. competition, sterilized organisms, Ephestia elutella 8232. delay, life span, fecundity, Spodoptera littoralis 5822. diets, effects on, Cydia pomonella 2765. effects on egg production, oviposition, Heliothis virescens 8213. effects on females locomotion, sexual behavior, Telegoryllus commodus 4284. effects on milk gland activity, feeding, blood meals, Glossina austeni 8229. effects on morphology, genitalia, Cochliomyia hominivorax 8212. effects on ovulation, Glossina morsitans 388. effects on reproductive organs secretions, color, Spodoptera littoralis 2707. effects on sex pheromone biosynthesis, aggregation, Ipsi paracornifus 3539. effects on survival, cold tolerance, Tiatochila 6698. egg production, nervous system role, Rhodnius prolixus 5080. epistasis effects on, fitness, Drosophila melanogaster 2318. flight activity, Nectopsyche alba, USA, Indiana 3862. frequency, effects on eggs fertility, Papilio polyxenes asterius 7491. insemination, effects on oviposition, Apis mellifera 8259.

Mating, (continued)

males, chromosomes, lesions, DNA repair, females, *Drosophila melanogaster* 6264.
 males, *Monochamus scutellatus* 1895.
 ovary maturation, corpora allata activity, *Dysdercus cingulatus* 9060
 overwintering, spermatozoa storage, *Scaptomyza aeneus*, USA, Florida 5148.
 oviposition, diurnal variations, *Rhagoletis mendax* 3639.
 pairing, rearing methodology, *Culex pipiens fatigans* 8853.
 population dynamics, life cycle, *Aedes iriomotensis*, *Aedes triseriatus*, Japan.
Y. sayama 16 7574.
 population genetics, multiple insemination, *Drosophila subobscura* 3921.
 reproduction, aggregation, phenology, *Euploeia core corinna*, Australia 7581
 sex pheromone, population density, effects on, *Heliothis zea* 9298
 sexual behavior, *Pseudomethocha proginqua*, USA, Montana 4295
 sexual receptivity, oviposition, feeding, *Amblyomma americanum* 9068
 siblings, sex ratio, parasitoids, *Scelionidae* 3609
 sperm displacement, population genetics, mathematical models, *Drosophila melanogaster* 9431.
 stimuli, oviposition, egg production, *Gryllobius sigillatus* 9049
 suppression, attractants, air permeation technique, pest control, *Eucosma sonomana* 4585
 suppression, pest control, population density, pheromones concentration, *Heliothis zea* 4610
 suppression, pest control, sex pheromone, air permeation technique, *Spodoptera frugiperda*, *Heliothis zea* 4624
Telenomus californicus, parasites, hosts, *Orgyia pseudotsugata* 2015
Mating behavior,
 activity patterns, dispersal, feeding behavior, *Batocera lineolata* 2789.
 activity patterns, display, *Eldana saccharina* 1906
 activity patterns, sex pheromone, *Apanteles glomeratus* 2740
 aggregation pheromone, males, *Rhyzopertha dominica* 1931
 aggressive behavior, coloration, mimicry, *Satius piscuolus* 5150
 aggressive behavior, sound production (biological), *Orchelimum gladiator*, *Diosostena carolina* 1151
 body movements, orientation, *Apanteles glomeratus* 7487
Brachyrupes megacephalus, Sicily, 4324
 breeding, mature, *Cochlyomyia hominivorax* 6037
 calling behavior, light intensity, temperature effects, *Chilo suppressalis* 3531.
 chemical communication, sex pheromone, *Tiphidae* 6665
 chemotaxis, effects on, *Aedes aegypti*, *Anopheles atroparvus* 9046
 circadian rhythms, adaptiveness, *Acrolepiopsis assectella* 4289.
 circadian rhythms, geographical variations, *Acrolepiopsis assectella*, Sweden.
 France, Spain, Algeria 5107
 circadian rhythms, seasonal variations, *Chilo suppressalis* 2729
 colonial characteristics, population genetics, *Lasius sakagami* 2376
 competition, chemotaxis, males, genetics, *Anopheles culicifacies* 1902
 competition, fecundity, males, radiation effects on, *Culex tarsalis* 1125.
 conspecifics recognition, tactile stimuli, *Enallagma* 6069
 copulation, *Glossina moritans moritans*, *Glossina austeni* 5841
 copulation, *Imparipes hirticornis* 6670
 copulation, oviposition, *Antheraea yamanai*, Japan 1910
 copulation, protection, females, territorial behavior, *Heterantra vulnerata* 4299
 copulation, sperm use, females, *Drosophila pseudoobscura* 397
 copulation, *Streptogonopus jerdani* 5109.
 correlation, DNA content, *Atta laevigata* 1137.
 courtship, auditory stimuli, auditory perception, *Drosophila mercatorum* 5852
 courtship, *Brachymeria lasus* 2741.
 courtship, *Chrysopa perla* 4301.
 courtship, *Dacus cucurbitae* 2745
 courtship, females competition, *Anabus simplex* 3532
 courtship, maturation, *Anastrepha ludens* 3529
 courtship, population structure, population genetics, *Drosophila primaeva*, Hawaii 1554.
 courtship, reproductive isolation, *Drosophila mojavensis*, *Drosophila arizonensis* 402.
 courtship, sex pheromone, *Diplazon pectoratorius* 5110.
 courtship, webs, *Portia fimbriata*, Australia, Queensland 4287
 courtship, *Wiedemannia lepidota* 3526.
 defense reactions, composition, sex pheromone, *Taeniopoda eques* 5010.
 deserts, role, visual stimuli, auditory stimuli, *Drosophila* 2737.
 deterrents, cuticle lipids, *Glossina moritans moritans* 8260.
 development, sexual isolation, *Dacus dorsalis* 8261.
 diel variations, photoperiod, *Chilo suppressalis* 2743.
 diets, *Mallophaga schwarzi*, Panama, Gamboa 6681
 disruption, pest control, (Z, Z)-11, 13-Hexadecadienal, *Amyelois transitella* 2219.
 disruption, pheromone traps, pest control, *Amyelois transitella* 8507.
 disruption, sex pheromone, biological control, *Heliothis virescens* 3763
 disruption, sex pheromone, pest control, *Anthonomus grandis* 9325.
 disruption, sex pheromone pest control, effects on, *Dermatopter variabilis* 1907.
 disruption, synthetic sex pheromone, pest control, *Eucosma sonomana* 8584
 effects on, source density, sex pheromone, *Synanthedon exitiosa* 699
 effects on, fecundity, *Cylas formicarius elegantulus* 1876
 environmental factors, temperature, copulation, *Ascia monuste orseis* 5104
 eye color mutants, *Drosophila melanogaster* 1135.
 eye color mutants, genetics, heterozygosity, *Drosophila melanogaster* 6276.
 females attractancy, age, males, *Tenebrio molitor* 7488
 fitness, breeding success, *Drosophila* 5059.
 flight activity, sex pheromone, *Hyphantria cunea* 3528
 frequency, *Hylenia antiqua* 8249.
 genes, hybrids, *Drosophila melanogaster*, *Drosophila simulans* 3109.
 genes, lethality, *Drosophila melanogaster* 5484.
 genetics, strains, *Tribolium castaneum* 6275.
 geographical distribution, life history, *Ictus hamatus* 4331.
 habitat, *Eristalisia* 8252.
Heliothis virescens 1900.
 homosexual behavior, body weight effects on, *Palmacoris nana* 1892.
 inbreeding, selection effects on, *Drosophila melanogaster* 5485
 intensity, mathematical models, *Drosophila* 1144.
 interspecific hybridization, genetic control, *Drosophila arizonensis*, *Drosophila mojavensis* 3108.
 intraspecific relationships, competition, *Caloptera discrepans* 1911
 life history, oviposition, development, *Langur retentor* 1187.
 males, sex pheromone components effects on, *Trichoplusia ni* 419
 marking, capture-recapture studies, *Glossina moritans* 1141.
 mate selection, *Dacus dorsalis* 2738.
 mate selection, natural selection, *Lepidoptera* 4285.

Mating behavior, (continued)

natural selection, *Pteropyx*, *Africomes*, *Xylocoris* 1152.
Neotamus vittatus 8250
 nesting behavior, parental behavior, *Eurytemera* 7484
 nesting behavior, parental behavior, reproductive strategy, *Phododryner nasidens* 6662
 oviposition, accessory gland secretions effects on, *Drosophila melanogaster* 5858.
 oviposition, activity patterns, *Drosophila amata* 1914.
 oviposition, *Apis mellifera* 4293
 oviposition, *Batocera lineolata*, Japan, Tokyo 5144.
 oviposition, fecundity, *Hydrolytus bajulus* 3527.
 oviposition, territorial behavior, *Platygypha calagata* 8614
 pest control, sex pheromone, females tethering, *Choristoneura fumiferana* 5291.
Platygypha fittsimoni, *Chlorocypha consueti*, *Rhinocypha unimaculata* 6667.
Podagron mantis 1654
 population dynamics, capture-recapture studies, *Anopheles culicifacies*, Pakistan 7402.
 recognition, males, antennal chemoreceptors, *Drosophila bipunctata*, *Drosophila malerkotiana* 8251.
 reproductive isolation, *Aponomma hydrosauri*, *Amblyomma albolineatum*, *Amblyomma limbatum* 7494.
 reproductive isolation, feeding types, *Dichocrocis punctiferalis*, Japan 1912.
 reproductive isolation, sympatric populations, *Ostrinia* 6659.
 role, sex pheromone, *Rhagoletis ceras* 8960.
 role, visual stimuli, pheromones, *Heliothis zea* 8253.
Schistopterum moebiusi 9070.
 sense organs effects on, *Blattella germanica* 2744.
 sex pheromone habituation effects on, *Pectinophora gossypiella* 426.
 sex pheromone, burrows, *Spodoptera abboti*, *Spodoptera rufipes* 6714.
 sex pheromone components effects on, *Heliothis zea* 3540.
 sex pheromone effects on, *Bradyia impanens* 416.
 sex pheromone effects on, males, *Glossina palpalis* 213.
 sex pheromone role, *Colletes cunicularius* 5101.
 sexual behavior, *Dacus oleae* 5844.
 sexual maturity, age, *Anopheles stephensi* 9073.
 sexual selection, *Phidippus johnsoni* 404.
 social behavior, genetics, *Apis mellifera*, *Melipona quadrifasciata* 1543.
 sperm displacement, males, bursa copulatrix, *Lestes vigilax* 8248.
 sperm storage, *Prolinophya marginata* 8258.
 sterilization, α radiation, fertility, females, *Dacus cucurbitae* 7457.
 swarming, population studies, *Culicoides variipennis*, USA, Virginia 5106.
 swarms, sex ratio, *Encicopthalma* 6671.
 temperature effects, *Cnaphalocrocis medinalis* 1138.
 temperature effects, *Ephestia cautella*, *Plodia interpunctella* 1874.
 temperature effects, *Stomoxys calcitrans* 1176.
 territorial behavior, *Scathophaga stercoraria* 410.
 vision, pheromones, *Heliothis zea* 4291
 visual perception, tracking, *Drosophila melanogaster* 908.
 workers, queens effects on, *Lasiosomus zephyrum* 2268.
Mating types,
 heterozygotes, fertility, genetics, translocations, pest control, *Musca domestica* 2328.
Matsucoccus josephi,
 morphology 8870.
Matsucoccus resinose,
 geographical distribution, new records, USA, Pennsylvania 3163.
Mattioliella crustosa,
 parasites, effects on survival, reproduction, *Nasutitermes corniger*, *Nasutitermes ephrae* 4193.
 parasites, infection, pathology, *Nasutitermes*, Panama 4199.
Mattison,
 eggs, diets effects on, *Pectinophora gossypiella* 7459.
 eggs, survival, *Atherigona soccata* 4434
 inhibition, pheromones effects on, *Solenopsis invicta* 390.
 mating behavior, courtship, *Anastrepha ludens* 3529.
 neurosecretion effects on, feeding, *Glossina moritans* 354.
 ovary, corpora allata activity, *Dysdercus cingulatus* 9060.
 ovary, corpora allata, biosynthesis, juvenile hormones, *Locusta migratoria* 2714.
 spermatozoa, accessory gland, *Ixodoidea* 4282.
Mauritius,
 new subspecies, taxonomy, morphology, *Zygonyx torrida insulana* 7906.
 pest outbreaks, morphology, taxonomy, *Pulvinaria iceryi* 3820.
Maxillary palps,
 morphology, movements, feeding behavior, exploratory behavior, *Gryllus bimaculatus* 8055
 sensilla, anatomy, ultrastructure, *Toxorynchites brevipalpis* 4137.
 sensilla, ultrastructure, *Gryllus bimaculatus* 3294
Mayaro virus,
 disease reservoirs, *Haemagogus janthinomys*, Brazil 625.
Mayetia pearsei,
 new records, geographical distribution, USA, Indiana 8701.
Mayetella destructor,
 pest control, wheat, pest resistance 661.
 pests, geographical distribution, abundance, crop fields, *Triticum*, USA 2191.
Maze learning,
 conspecifics experience effects on, *Isopoda* 1165.
Measurements,
 electronic equipment, ingestion, saliva, *Nephotettix cinctipes* 1699.
Mechanical properties,
 cuticle, *Locusta migratoria* 7283.
 defence secretions, morphology, *Goniotropis* 3381.
 ear, auditory perception, tympanum, acoustic trachea, *Tettigoniidae*, *Gryllidae* 4977
 ear, auditory perception, tympanum, *Noctuidae*, *Acrididae* 4976.
 muscles, *Araneae* 4123.
Mechanical stimuli,
 discrimination, wind, escape behavior, *Periplaneta americana* 2752
 effects on development, flight muscle, *Anastrepha suspensa* 8228.
 predatory behavior, molting, *Rana linearis* 8295.
 receptors, *Glossum* 2915
 webs: vibrations, transmission, *Araneae* 5913
Mechanisms,
 cold tolerance, freezing, Insecta, Antarctica 2730
 detoxification, pesticide resistance, permethrin, phrethroids, *Musca domestica* 1056

- Mechanoreceptors,**
 antennal sensilla, ultrastructure, *Hypera postica* 3289.
 colchicine effects on, electrical properties, *Periplaneta americana* 3291.
 food intake control, *Culex inornatus* 3312.
 leg. innervation, peripheral nervous system, central nervous system, *Schistocerca gregaria* 8905.
 leg sensilla, topography, morphology, *Periplaneta americana* 4980.
 lymphatic slit sense organs, transfer, electrophysiological recording, *Cupini* 4129.
 maxillary palps, sensilla, anatomy, ultrastructure, *Toxorhynchites brevipalpis* 4137.
 mouthparts, sensilla, innervation, ultrastructure, females, *Simulium venustum* 4142.
 nervous system, *Periplaneta americana* 2537.
 nervous system, *Periplaneta americana* 3285.
 neurons, toxicity, venom, *Crustacea*, *Latrodectus mactans* 9017.
 neurons, ultrastructure, *Pieris rapae* 903.
 neurophysiology, *Locusta migratoria* 6533.
 neurophysiology, *Locusta migratoria*, *Decticus verrucivorus*, *Tettigonia cantans* 7293.
 neurophysiology, *Periplaneta americana* 4130.
Periplaneta americana, electron microscopy, femur spine neurons, 122.
 sensilla, spatial distribution, thorax, leg, *Schistocerca gregaria* 910.
 sensory stimuli, transduction, *Periplaneta americana* 2536.
 temperature, pressure effects response, *Periplaneta americana* 145.
 vibratory stimuli, neurophysiology, *Locusta migratoria*, *Decticus verrucivorus* 3298.
- Mecistogaster jocaste,**
 oviposition, egg-throwing, trees, Bolivia 6677.
- Mecometus thalassinus,**
 new records, geographical distribution, USA, Rhode Island, USA, New York 5525.
- Mecoptera,**
 surveys, check lists, USA, Kentucky 3152.
- Mecynotarsus chalumaeui,**
 new species, West Indies 1612.
- Meditera ruficornis,**
 morphology, identification keys 6499.
- Media (culture),**
 cell culture methodology, cell lines, *Lepidoptera* 8059.
 cell culture methodology, fat body cells, *Mamestra brassicae* 876.
 cell culture, *Spodoptera frugiperda* 878.
 cell culture, TC-199-MK, *Insecta* 5618.
Drosophila melanogaster 7256.
 rearing, development, fecundity, *Corycia cephalonica* 7452.
 rearing, extraction methodology, pupae, *Diatraea grandiosella* 4087.
 rearing, growth index, larvae, *Corycia cephalonica* 7467.
 rearing, parasites, *Bovicola caprae* 8337.
 selection, egg production, development, population genetics, *Tribolium castaneum* 1980.
 TC-199-MK, growth, cell lines, *Insecta* 8852.
- Media (isolation),**
 pathogens, infection, isolation, *Haemaphysalis leporispalustris* 4187.
- Medicago,**
 host plants, effects on activity patterns, *Hypera postica* 2055.
- Medicago sativa,**
 agricultural practices, pollination, *Apis mellifera*, USA, California 2941.
 crop fields, foraging behavior, fenvalerate effects on, *Apis mellifera* 4475.
 crop fields, infestation, *Agromyza*, Europe 8586.
 crop fields, pests, sampling methodology, *Empoasca fabae* 8470.
 crop fields, yield, damage, pests, *Philaenus spumarius* 8561.
 crop production, pest control, *Insecta* 3015.
 crop yield, damage, pests effects on *Acyrtosiphon kondoi* 3774.
 cultivars, resistance, pest control, *Acyrtosiphon kondoi*, *Acyrtosiphon pisum* 3801.
 environmental stress, effects on survival, reproduction, *Therioaphis maculata* 9168.
 host plants, chemical composition, pests effects on, *Acyrtosiphon* 540.
 host plants, growth, fecundity, survival, *Acyrtosiphon kondoi* 6944.
 host plants, growth, infestation effects on, *Enophyes medicaginis* 2854.
 host plants, oviposition, site selection, *Orius trisulcator* 1894.
 host plants, pest resistance, antibiotics, *Therioaphis trifolii* 7774.
 host plants, pest resistance, damage, *Acyrtosiphon* 2256.
 host plants, pest resistance, water stress effects on, *Therioaphis maculata* 5324.
 host plants, pesticide residues, pollen, nectar, nontarget organisms, *Megachile rotundata* 8395.
 host plants, predators effects on chemical composition, *Agromyza frontella* 552.
 pests damage, *Empoasca fabae* 9292.
 pests effects on chemical composition, *Agromyza frontella* 9296.
 pests effects on, crop production, *Therioaphis trifolii* 685.
 pests, effects on crops, *Acyrtosiphon pisum* 6970.
 pollination, flight range, *Pithitis smaragdula* 7564.
 resistance, susceptibility, pests, bionomics, *Therioaphis trifolii* 7757.
 yield, chemical composition, pests effects on, *Empoasca fabae* 731.
 yield, defoliation, infestation effects on, *Hypera postica* 6962.
 yield, economics, pests infestation effects on, *Agromyza frontella*, USA, Vermont 5563.
- Medical importance,**
 agricultural practices, identification, taxonomy, *Insecta*, Africa 3782.
 allergens, *Pyroglyphidae*, Switzerland 672.
 agriculture products, Romania 2928.
 bites 645.
 bites, stings, man, *Arthropoda*, USA, Georgia, Ft. Stewart 6886.
 bites, stings, treatment, *Latrodectus mactans*, *Loxosceles reclusa*, *Chiracanthium* 627.
 bites, stings, treatment, *Scorpiones*, *Reduviidae* 629.
 bites, toxins, *Chilopoda*, *Diplopoda*, Switzerland 641.
 bites, venom, *Araneae*, Europe 5287.
 diagnosis, ova hatching, *Sarcophaga scabiei* 3668.
 disease transmission, *Chikungunya virus*, comparative studies, *Ornithodoros* 549.
avignyi, *Culex*, *Aedes*, *Mansonia* 1380.
 disease transmission, vectors, *cimex* 1354.
 disease transmission, vectors, historical account, *Arthropoda* 2929.
 parasites infection, *Ceratophyllus fasciatus*, *Rattus rattus*, *Nigeria* 2933.
 parasites vectors, *Armigeres subulatus*, Malaysia 6057.
 pests, *Pyroglyphidae* 655.
 skin diseases, *Sarcophaga scabiei*, *Psoroptes*, *Demodex* 2932.
- Medical importance, (continued)**
 stings, man, *Solenopsis* 6893.
 taxonomy, morphology, *Simulium amazonicum*, Brazil 3196.
 vectors, disease transmission, yellow fever virus, *Haemagogus equinus* 1379.
 vectors, *Gestah virus*, *Culex tritaeniorhynchus*, Philippines 1378.
 vectors, role, enzyme-linked immunoassay, *Insecta* 4092.
- Mediterranean Region,**
 geographical distribution, *Megacephala euphratica* 2373.
 keys, morphology, *Paradipyrax* 8782.
 phylogeny, geographical distribution, morphology, *Oxythyrea* 1704.
 taxonomy, morphology, keys, *Anobidae* 1604.
- Medon dilutus,**
 new records, geographical distribution, Sweden, Gotska Sandöen I. 4704.
- Medon piceus,**
 new records, geographical distribution, German Dem. Rep., Potsdam, Rietzer See 4711.
- Medyostena duplex,**
 new genera, morphology, Madagascar 843.
- Megababita patula,**
 new species, taxonomy, morphology, South America 5587.
- Megabothris abantis,**
 parasites, range extension, Mammalia, USA, Alaska 4743.
- Megabothris turbidus,**
 nests entomofauna, *Micromys minutus* 460.
- Megacanthaspis,**
 taxonomy, morphology, phylogeny 7202.
- Megacephala euphratica,**
 geographical distribution, new records, Mediterranean Region 2373.
- Megacephala virginica,**
 chemical content, defense secretions 259.
- Megacerus acerbus,**
 synonymy, *Bruchus bipunctatus*, Nearctic Region 3162.
- Megachile centumcularis,**
 habitat preferences, nesting, urban environment, walls, British Isles 1182.
- Megachile inermis,**
 sex ratio, habitat, nests 1279.
- Megachile mendica,**
 sex ratio, habitat, nests 1279.
- Megachile nivalis,**
 occurrence, apiculture hives, Canada, Saskatchewan 4603.
- Megachile relativa,**
 occurrence, apiculture hives, Canada, Saskatchewan 4603.
 sex ratio, habitat, nests 1279.
- Megachile rotundata,**
 contamination, pesticide residues, insecticides, pollinators 4317.
 emergence, temperature effects on, pupae 8230.
 host-parasite interactions, traps, crop protection, color, catching methods, attractants, site location, *Sapya pumila* 718.
 infection, etiology, symptoms, *Acropyrax aggregata* 5729.
 mass rearing, methodology, disinfection 60.
 nontarget organisms, pesticide residues, host plants pollen, *Medicago sativa* 8395.
 population regulation, *Cleptoparasitism* effects on, *Coniothrips rufocaudata* 4375.
 rearing methodology, nests, materials 4921.
 toxicity, insecticides, nontarget organisms 4224.
- Megachile rubi,**
 colonial characteristics, nesting behavior, evolution 6983.
- Megachile texana,**
 colonial characteristics, nesting behavior, evolution 6983.
- Megachilidae,**
 habitat preferences, nesting, urban environment, walls, British Isles 1182.
- Megaderma lyra lyra,**
 predators, pest control, *Insecta*, India 5214.
- Megaderma spassus,**
 hosts, parasites distribution, *Eocenes spassus* 4387.
- Megaloblasta blaberoides,**
 disturbance effects on stridulation, defense mechanisms 4341.
- Megalocera recticollis,**
 interspecific relationships, competition, herbivores, mortality, *Notostira elongata* 3631.
- Megalopteryx opercularis,**
 hosts, hyperparasitism, oviposition, *Lampro leucator*, *Lymnec orbus* 3579.
 hosts, life cycle, parasites 2027.
 parasitoids, hyperparasitism, *Drumsticks incongrua*, *Arachnophaga dureicorpus* 8311.
- Megolista antefratica,**
 new species, morphology, Madagascar 843.
- Megalotrochus spottedi,**
 disease transmission, mosaic disease, vectors, *Vigna unguiculata* 546.
- Megamelanus bicolor,**
 abundance, salt marshes, USA, Florida 5241.
- Megamelus david,**
 life history, morphology, immature stages, parasites 1987.
- Meganominae,**
 species, review 6436.
- Megapodagrionidae,**
 males, anatomy, coloration, abdomen, wings 3362.
- Megaponera foetens,**
 predation, food organisms, colonies, *Macrotermite* 2109.
- Megarhysa,**
 parasites, aggregation behavior, sex discrimination, rectal gland 1481.
 sexual behavior, interspecific relationships 409.
- Megarhysa atrata,**
 sexual behavior, interspecific relationships 409.
- Megarhysa greeni,**
 sexual behavior, interspecific relationships 409.
- Megarhysa macrurus,**
 sexual behavior, interspecific relationships 409.
- Megaselia,**
 abdomen, termini, morphology, North America 2415.
 synonymy, *Endopenthes* 7181.
- Megaselia argiopephaga,**
 new species, taxonomy, morphology 7966.
- Megaselia carola,**
 new species, morphology, taxonomy, North America 2415.

- Megastelia halterata**,
biological control, parasites, mass rearing, *Howardula husseyi* 3027.
pests, chemical control, methodology, dichlorvos 1461.
vectors, disease transmission, Basidiomycetes culture, *Verticillium fungicola* 5394
- Megastelia lanata**,
new species, morphology, taxonomy, North America 2415.
- Megastelia rotunda**,
new species, morphology, taxonomy, North America 2415.
- Megastelia sandhui**,
new species, morphology, taxonomy, pests, India 823
- Megastelia unguolata**,
morphology, taxonomy, North America 2415.
- Megastipidae**,
synonymy, *Conostigmus cylindricus*, *Conostigmus melanocephalus* 8833.
- Megastigmus atedius**,
chemical control, pest control, *Pinus strobus*, USA, North Carolina 2982.
- Megastigmus pictus**,
males, occurrence, life cycle, Poland 9110.
- Megastigmus specularis**,
diapause, emergence, population dynamics 5995.
- Megastigmus spermotrophus**,
diapause, emergence, population dynamics 5995
- Megastrebria**,
morphology, keys, geographical distribution, Philippines 871.
- Megoura**,
polymorphism, photoperiod effects on, pigmentation, energetics 2699
- Megoura viciae**,
cuticle, head, light penetration 2533.
genes, lethality, abortion, eggs, sex determination, males 6252.
- Melosis**,
cell cycle, *Boophilus microplus*, *Rhipicephalus sanguineus* 1517.
centromeres asynapsis, effects on crossing-over, *Drosophila* 9402.
chromosome number, *Eriogyna pyretorum* 2430.
chromosomes, Carabidae 3889
chromosomes, irradiation, physicochemical properties, kinetochore, Lepidoptera 1516.
chromosomes, karyotypes, *Satcheliella nubila* 3896.
chromosomes, microtubules, *Drosophila melanogaster* 3893.
chromosomes orientation, organelles effects on, *Drosophila melanogaster* 1519.
epistatic effects on, fitness, *Drosophila melanogaster* 2318.
evolution, Insecta 8668
galls effects on, polyploids, *Persea falcata*, Insecta 8343
Hymenoptera 8243
Insecta 8242
karyotypes, *Hastella* 3899
karyotypes, males, *Berdeniella*, *Satcheliella opaca*, *Tonnoniella pulchra* 2329
karyotypes, sex chromosomes, *Antheraea compta*, *Antheraea assamensis* 3897
karyotypes, sex determination, *Heteropeza pygmaea* 8622
nucleoproteins, chromosomes fluorescence, spermatocytes, Lepidoptera 6262
pairing, males, gene mapping, rRNA genes, heterochromatin, *Drosophila melanogaster* 8636
parthenogenesis, hybrids, *Warramba virgo* 5460
segregation, heterochromatin homology, autosomes, spermatogenesis, *Drosophila melanogaster* 7848
sex chromosomes, karyotypes, *Nilaparvata lugens* 7845.
spermatogenesis, electrondense material, nucleus, *Melipona* 5097.
- Meiotic drive**,
polymorphism, genetic factors, models, *Aedes aegypti* 772.
- Melaleuca quinqueveneria**,
wood extracts, effects on survival, *Reti culitermes flavipes*, *Coptotermes formosanus* 1810
- Melanagromyza obtusa**,
karyotypes, salivary gland chromosomes, pests, India 5466
oviposition, host plants, substrate preferences, *Cajanus cajan* 6674.
- Melanargia galathea**,
geographical distribution, food plants, British Isles 9091.
marking, capture-recapture studies 6699.
- Melanism**,
absorption, solar radiation, diel activity, *Colias* 6536.
coloration, population studies, *Biston cognataria*, USA, Pennsylvania 7579
- Melanitta deglandi**,
parasites, Mallophaga 2833.
- Melanitta nigra**,
parasites, Mallophaga 2833.
- Melanitta perspicillata**,
parasites, Mallophaga 2833
- Melanization**,
coloration, hormones, *Leucania separata* 3360
genetic variance, genotype-environment interactions, *Alaphila pomataria* 8664
hemolymph 20-hydroxyecdysone effects on, *Dilephila nerii* 8094.
hemolymph 20-hydroxyecdysone effects on, *Dilephila nerii* 8956
- Melanocallis caryaeformis**,
biological control, *Coccinella septempunctata* 694.
feeding damage, *Carya illinoensis* 9345.
- Melanoma**,
morphogenesis, defective mutant, *Drosophila melanogaster* 1527.
- Melanophila**,
parasitism, drought effects on, *Coniferales*, USA, California 4394
- Melanophilinae**,
pest control, pathogens, baiting 1398.
- Melanopius**,
lipids, cuticle, chemical composition 1729
- Melanopius birittatus**,
hemolymph, hemagglutination 3307.
- Melanopius bivittatus**,
infection methodology, spores, *Entomophaga grylli* 4089.
lipids, cuticle, chemical composition 1729.
- Melanopius dawsoni**,
lipids, cuticle, chemical composition 1729.
- Melanopius differentialis**,
infection methodology, spores, *Entomophaga grylli* 4089.
- Melanopius femurbrum**,
infection methodology, spores, *Entomophaga grylli* 4089.
lipids, cuticle, chemical composition 1729.
- Melanophus sanguinipes**,
albinism, heritability, genetics 6269.
cell culture, infection, *entomopoxvirus* 3264.
cell lines, cell culture, embryos 4115.
chemical control, sulfur dioxide, population density, prairies 2990.
entomopoxvirus, structural protein, isolation, characterization, occlusion body protein 4204.
ethylene effects on growth, nymphs, females longevity 4264.
hemolymph, hemagglutination 3307.
parasites, mortality, predation effects on, *Blaesoxipha* 6027.
pest control, biological control, pathogens, *Nosema locustae* 3813.
population dynamics, mortality, longevity, sampling 5994.
protein kinase, cyclic nucleotides, epidermis, molting 6318.
toxicity, diflubenzuron, nymphs 6628.
- Melanostoma mellinum**,
foraging behavior, interspecific relationships, flowers, *Bombus* 2115.
- Melanotus**,
pests, crop fields, *Capsicum annuum*, India, Dharwad 5365.
- Meliathemma polita**,
morphology, syntypes 8891.
- Mellilotus alba**,
host plants, role, larvae development, *Anticarsia gemmatilis* 2067.
- Melipona**,
spermatogenesis, electrondense material, nucleus 5097.
- Melipona fasciata**,
colonies, nesting behavior, mutualism, *Melipona flavipennis* 6985.
- Melipona favosa favosa**,
colonial characteristics, nesting behavior, division of labor 7005.
- Melipona flavipennis**,
colonies, nesting behavior, mutualism, *Melipona fasciata* 6985.
- Melipona interrupta**,
pollinators, synchronization, reproductive strategy, *Hybanthus prunifolius*, Panama 2080.
- Melipona nigra**,
genetic load, sex alleles 5495.
- Melipona quadrifasciata**,
genetic load, sex alleles 5495.
inbreeding, age composition, longevity, males, diploidy, haploidy, workers 9032.
social behavior, mating behavior, genetics 1543.
- Melipona quadrifasciata anthidioides**,
learning behavior, extinction, punishment, reinforcement, response acquisition 6688.
- Melipona quadrifasciata anthidioides**,
visual discrimination learning, color, forms, light intensity 5123.
- Melipona rufiventris**,
genetic load, sex alleles 5495.
visual discrimination learning, color, forms, light intensity 5123.
- Melipona rufiventris flavolacata**,
foraging behavior, cleptoparasitism, colonies 6743.
- Melipona scutellaris**,
genetic load, population genetics 5495.
- Meliponinae**,
association, phoresy, *Scotocryptini*, Panama 5227.
food plants, pollen, surinam 5196.
phoresy, reviews, *Scotocryptini*, Neotropical Region 9130.
pollination, flowering, *Cardiodovicia palmata* 9150.
- Melissodes agilis**,
foraging behavior energetics, pollen, *Helianthus annuus* 6735.
- Melissoptus latifrons**,
pest control, attractants, efficacy, pheromone traps 740.
- Melitaea delone**,
new records, geographical distribution, Spain 7076.
- Melitaea trivia ventorillensis**,
polymorphism, coloration, Spain 6501.
- Melittinae**,
classification, taxonomy revision 1661.
- Melittidae**,
taxonomic revision, reclassification 6436.
- Melittin**,
pH effects on conformation, C.D., venom, *Apis mellifera* 4206.
- Melanocallis caryaeformis**,
feeding, effects on growth, damage, *Carya illinoensis* 4587.
- Meloidontia melolontha**,
entomopoxvirus infection, pathogenesis 7364.
- Melophagus ovinus**,
milk production glands, histochemistry, reproduction 3389.
Trypanosoma melophagium pathogenicity 285.
- Melyridae**,
abundance, construction disturbance effects on 1284.
- Membracidae**,
surveys, check lists, USA, Kentucky 3154.
- Membrane composition**,
pesticide resistance, pyrethroid, *Musca domestica* 5792.
- Membrane permeability**,
gap junctions, epidermis, segments, *Oncopeltus fasciatus*, *Calliphora erythrocephala* 8901.
- Membrane potential**,
muscles, calcium currents, potassium currents, *Carausius morosus* 8904.
synapses, neurons, ocelli, brain, *Locusta* 4961.
- Membrane structure**,
peritrophic membrane, midgut, histochemistry, *Thrips validus* 7312
- Membranes**,
cell surface, adenosinetriphosphatase hydrolysis β -(2-furyl)-acryloyl phosphate, embryos, *Manduca sexta* 4949.
pests, γ radiation, effects on physical activity, *Dermestes vulpinus* 5133.
salivary gland, calcium transport, *Phormia regina* 1798.
segments, ultrastructure, morphology, *Locusta migratoria migratorioides* 3271.
- Memory**,
learning behavior, population characteristics, *Drosophila* 2764
visual discrimination learning, deficient mutant, *Drosophila melanogaster* 1522
- Menacanthus alaudae**,
morphology, parasites, *Galeria cristata* 9145.
- Menacanthus carduelis**,
morphology, parasites, *Carduelis carduelis* 8049
- Menacarus ovalis**,
respiratory system anatomy, adaptations, deserts 8924.

- Mendosella incisa**,
new species, taxonomy, morphology, South America 7982.
- Mendosella serratus**,
new species, taxonomy, morphology, South America 7982.
- Mendosella tarandus**,
new species, taxonomy, morphology, South America 7982.
- Menemerus confusus**,
neuromusculature, anterior median eye, calcium, magnesium, sensitivity, illumination 5667.
- Menochilus sexmaculata**,
diets, effects on, oviposition, longevity, sexual behavior 1117.
- Menopon pallens**,
biometrics, morphology, parasites, Phasianidae, Spain, Cordoba 8045.
- Mentha piperita**,
crop fields, pest control, sampling methodology, statistical analysis, *Tetranychus urticae* 8505.
- Meoneura**,
abundance, habitat preferences, Czechoslovakia 6872.
- Meoneura moravica**,
new species, taxonomy, morphology, Czechoslovakia 6872.
- Meotia exillima**,
new records, geographical distribution, German Dem. Rep., Potsdam, Rietzer See 4711.
- Mephosofuan**,
insecticides, systems, efficacy, *Athengona soccata* 7777.
pesticide residues, toxicity, soil, *Zea mays* 7709.
toxicity, efficacy, *Chilo partellus* 3031.
- Meranopius**,
taxonomy, revision, identification keys, F'isopian Region 1652.
- Mercapturic acid**,
biosynthesis, phenobarbitone effects on, *Musca domestica* 3432.
- Mercuric chloride**,
repellents, pest control, *Dysdercus koenigii* 7340.
- Mercury**,
bioaccumulation, Basidiomycetes, larvae, Diptera 5129.
bioaccumulation, food organisms, larvae, Diptera 2620.
pollution effects, bioaccumulation, Calliphoridae 7354.
- Mermithidae**,
host range, first record, Culicidae, Angola 1271.
parasites, effects on hosts, pathology, biological control, Simuliidae 1403.
parasites, effects on hosts, pathology, biological control, Insecta 3749.
parasites, effects on hosts physiology, Insecta 3404.
parasites, hosts biological control, disease transmission vectors, Culicidae 3661.
- Mermithoidae**,
parasites, effects on hosts morphology, Einfeldia dissidens 7393.
- Merope tuber**,
stimulation, morphology, stridulatory apparatus 4112.
- Merothripidae**,
new records, China, People's Rep. 45.
- Mesaphorura hyphalis**,
new species, taxonomy, morphology 8778.
- Mesaphorura jarmilae**,
new species, taxonomy, morphology 8778.
- Mesaphorura jirdi**,
new species, taxonomy, morphology 8778.
- Mesaphorura sylvatica**,
morphology, instars 6486.
morphology, taxonomy 8778.
- Mesaphorura yosii**,
morphology, instars 6486.
- Mesembryus**,
systematics 4049.
taxonomy, synonymy, Hesychia 4050.
- Mesentery**,
epithelium, regeneration, cell division, Entomobryomorpha 7436.
- Mesidia**,
wings morphology, identification 4108.
- Mesidiops**,
wings morphology, identification 4108.
- Mesochorus centrifuga**,
new genera, morphology, Madagascar 843.
- Mesonemia ilupuyi**,
new species, taxonomy, morphology, Senegal 7999.
- Mesocryptus leuckartii piloma**,
predation, biological control, larvae, Aedes aegypti, Aedes polynesiensis 4503.
- Mesopocopus graecus**,
new species, taxonomy, morphology, Greece 8003.
- Mesopocopus lusitanus**,
new species, taxonomy, morphology, Portugal 8003.
- Mesostigmata**,
abundance, soil, leaf litter, forests, environmental factors, Australia 2881.
distribution, soil, leaf litter, forests, Australia 4472.
surveys, Nigeria 1588.
- Mesothemius**,
nomenclature, taxonomy, synonymy, Erythemis, Lepthemis 846.
- Metallic rate**,
body weight, temperature effects on, *Hydropsyche venularis* 4172.
effects on lipid peroxidation, *Musca domestica* 193.
- Metabolism**,
aging, enzymatic activity, esterase, *Callosobruchus maculatus* 4238.
agrochemicals, growth regulators, EL-494, *Lymantria dispar*, *Glycine max* 4999.
alcohol, genetic control, alcohol dehydrogenase, *Drosophila* 3909.
amino acid composition, developmental stages, *Schistocerca gregaria* 1752.
amino acids, aging effects on, *Bombyx mori* 4236.
amino acids, aromatic compounds, cuticles, Insecta 171.
amino acids, developmental stages, *Glipina berylliae* 7318.
anerochosis, larvae, *Chaoborus crystallinus* 3368.
chlorideform, insecticides, larvae, diapause, *Diatraea grandiosella* 3333.
circulatory system, hemolymph, *Planorbis americana* 4989.
cold resistance, hibernation, *Dendroctonus micans* 6560.
cyclic nucleotides, *Drosophila melanogaster* 3912.
3-deoxy-3-fluoro-D-glucose, effects on glycolysis, toxicity, *Locusta migratoria* 6619.
diapause, conferences, Insecta 3959.
diapause eggs, biochemical analysis, carbohydrates, *Atrachya mentresii* 1098.
- Metabolism (continued)**
diets effects on, *Isotermia viridis* 4268.
diflubenzuron, sesoxane, *Musca domestica* 5773.
diflubenzuron, toxicity, effects on chemical composition, *Aedes aegypti* 302.
ecdysone, reviews, Insecta 6574.
ecdysone, *Triatoma infestans* 3322.
ecdysoteroids, embryogenesis, *Locusta migratoria* 3345.
ecdysteroids, regulation, Insecta 3344.
effects on diapause termination, *Hyalophora cecropia* 3480.
energetics, overwintering aggregation, *Danaus plexippus*, USA, California 6844.
energetics, oxygen consumption, colonies, *Apis mellifera* 4641.
energy resources, developmental stages, *Stomoxys calcitrans* 4159.
ethionine, methionine, *Agria bousei* 3319.
fat body, *Planorbis americana* 4998.
fatty acids, comparative studies, *Galleria mellonella*, *Lucilia sericata*, *Exenastes roborator* 202.
flight, enzymes, energy output, *Drosophila melanogaster* 2519.
flight muscle, flight, *Locusta* 894.
food utilization, carbohydrates, *Oxyrhachis tarandus*, *Oxyareneus hyalimipennis* 7305.
food utilization, sugars, *Oxyrhachis tarandus*, *Hyalimipennis* 7321.
fructose, *Oxyareneus hyalimipennis*, *Oxyrhachis tarandus* 7322.
indole-3-acetic acid, gut, *Heteroptera* 1411.
insecticides, dieltrix, microorganisms, cuticle, *Calliphora erythrocephala* 5799.
insecticides, diflubenzuron, *Tetranychus urticae* 1360.
insecticides, permethrin, cypermethrin, topical application, *Wiscana cervinata* 5787.
insecticides, topical application, thiothiobromides, *Diatraea grandiosella* 4232.
insecticides, trialomethrin, triacetythrin, *Trichoplusia ni*, *Musca domestica*, *Periplaneta americana* 316.
juvenile hormones, diapause, *Lepidoptera decemlineata* 3479.
juvenile hormones, proteins, enzymatic activity distribution, *Trichoplusia ni* 206.
leucine, kinetics, hemolymph, *Achoa janata* 4988.
lipid biosynthesis, symbiosis, *Reneulimera flavipes*, *Coptotermes formosanus* 3573.
methyl bromide, fumigants, resistance, *Staphylinus granarius* 1061.
nitrogen, enzymatic activity, gut microflora, *Nasutitermes exosus*, *Coptotermes* 3573.
lactate 233.
nuclear polyhedrosis virus effects on *Bombyx mori* 284.
overwintering, cold tolerance, larvae, *Eumastola solidaginis* 4254.
overwintering, enzymatic activity, *Eumastola solidaginis* 4255.
oxygen consumption, diel periodicity, colonies, *Apis mellifera* 5417.
oxygen consumption, juvenoids effects on, *Heliothis armigera* 7329.
oxygen consumption, life span, *Musca domestica* 4237.
periodicity, diapause, pupae, *Sarcophagidae* 3427.
pesticide resistance, dieltrix, *Tetranychus urticae* 1840.
phosphene, fumigants, pest control, *Rhizopertha dominica* 1044.
phytochrome, symbiosis, *Eucelast incensus* 6748.
pigments, β -carotene, 2-vol, β -carotene 2-one, *Ectatosoma* 172.
proteins, nuclear polyhedrosis virus infection effects on, *Apona crataegi* 8987.
purnes, mutants, lethality, *Drosophila melanogaster* 3095.
queens, broods effects on colonies, *Apis mellifera* 8590.
respiration, cold tolerance, acclimation, *Belgica anartica* 8107.
respiratory temperature, *Rhinoscirtus padbergi* 4986.
role, diapause, larvae, *Diatraea grandiosella* 3476.
saccharides, juvenile hormones effects on, *Pyrrhocoris apterus* 6570.
salivary gland, histology, mitochondria, ATP levels, *Chironomus tentans* 4952.
supercooling, cold tolerance, *Eumastola solidaginis* 4144.
m-lyl-N-methylcarbamate, effects on oxidation, phenylalanine, tyrosine, *Bombyx mori* 7317.
tryptophan, mutation, neurons, *Drosophila melanogaster* 1534.
tyrosine, bioaccumulation, metabolism, hemolymph, *Bombyx mori* 2570.
tyrosine, measuring techniques, *Aedes aegypti* 170.
water loss, cuticular permeability, *Ly a howardii*, USA, Hawaii 2607.
- Metabolites**,
dieltrix, acute toxicity, *Blaberus discoloris* 301.
fungal flora, toxicity, larvae, *Fusarium* 996.
growth regulators, fluorescence, cytol, *one P-450*, microsomes, *Musca domestica* 5693.
hemolymph, bioaccumulation, tyrosine metabolism, *Bombyx mori* 2570.
insecticides, phosphate, toxicity, *Aphis fabae* 5777.
larvae, characterization, effects on hosts, *Cylas formicarius* 951.
- Metabolites toxicity**,
temperature effects, larvae, *Tenebrio molitor* 996.
- Metacelosis**,
systematics, taxonomic revision, new species, 16 species 2460.
- Metacelosis foersteri**,
systematics, taxonomic revision 2460.
- Metacelosis amphibia**,
polytene chromosomes, karyotypes 5467.
- Metadendrops longicornis**,
morphology, taxonomy 3181.
- Metalus nepalensis**,
taxonomy, new species, morphology, geographical distribution, new records, Nepal 2447.
- Metalus satoi**,
taxonomy, new species, morphology, geographical distribution, new records, Korea 2447.
- Metals**,
toxicity, ponds, *Orthocladus consobrinus*, *Limnephilus pallens*, *Chironomus riparius*, Canada, Northwest Territories 6696.
- Metamorphosis**,
amino acid pools, glycogen, lipids, larvae, *Callosobruchus chinensis* 2712.
amino acids, lipids, larvae, *Callosobruchus chinensis* 5072.
biochemistry, cytochrome c, *Musca domestica* 6555.
body size, photoperiod, *Labidomera clivicollis* 5087.
development, hormones, *Procoena* 11, larvae, *Rhodnius prolixus* 1882.
developmental stages, *Drosophila melanogaster* 3460.
differentiation, humerus imaginal discs, *Drosophila melanogaster* 331.
DNA biosynthesis, polyiodization, fat body, *Schistocerca gregaria* 7832.
effects of precocene II, larvae, *Rhodnius prolixus* 364.
effects on brain biochemistry, cyclic AMP, *Mamestra configurata* 960.

Metamorphosis, (continued)

- effects on proteins levels, DNA, RNA, *Bombyx mori* 952.
epidermis cell cycle, *Tenebrio molitor* 1086
fat body, proteins storage, *Sarcophaga peregrina* 3318.
feeding behavior, *Allium sativum* extracts effects on, *Epilachna varivestris* 7534.
glucogenesis, glucose metabolism, *Sarcophaga ruficornis* 3329
hemolymph protease inhibitors, *Bombyx mori* 7478
juvenile hormones analogs effects on, *Pyrrhonoctes apterus* 2711
juvenile hormones role, *Insecta* 6573
life history, body size effects on, *Oncopeltus* 1956.
light intensity, *Cloeon cognatum* 1950
molting, hormones, developmental stages, *Manduca sexta* 967
molting, larvae, juvenile hormones, enzymatic activity, *Manduca sexta* 3500
molting, physiology effects on, *Insecta* 3517
mortality, pest control, juvenile hormones, endocrinology, precocenes, *Insecta* 8442
pupae, chilling, crowding effects on, *Galleria mellonella* 2724
pupation, water balance, *Manduca sexta* 7353.
seeds extracts effects on, *Azadirachta indica*, *Ceratitis capitata* 9153.
taurine biochemistry, pupae, *Manestra configurata* 389.
toxicology, plant extracts, larvae, *Epilachna varivestris*, *Azadirachta indica* 3435.
Trachyspermum ammi oils effects on, *Aedes aegypti* 6623
tyrosine 3-monooxygenase activity, tyrosine levels, *Penplaneta americana* 9042.
- Metanastria recta**,
pest control, new records, pest outbreaks, *Psidium guajava*, India, Punjab 7738
- Metanephia variabilis**,
polytene chromosomes, karyotypes 5467
- Metaparasitylenchus**,
natural enemies, *Neochetna bruchi*, *Neochetna eichhorniae*, Argentina 8379
- Metaparasitylenchus guadeloupensis**,
new species, parasites, infestation, *Hexacaulis guyanensis* 6613
- Metaphase**,
chromosomes, banding, heterochromatin distribution, comparison *Drosophila nasuta*
nasuta, *Drosophila nasuta albomacra* 6265
- Metaphysus**,
new species, taxonomy, morphology, *asterolecanii*-group, 26 species, South Africa 4874
Tapinoma nigerrimum, *Cocophagus lycimnia*, interspecific relationships, parasitism, France 3612
- Metaphysus funicularis**,
natural enemies, pest control, *Pulvinaria mesembryanthemum* theme, *Pulvinaria deltoidea*, USA, California 9316.
- Metaphysus stramineus**,
natural enemies, pest control, *Pulvinaria mesembryanthemum* theme, *Pulvinaria deltoidea*, USA, California 9316.
- Metaphysus swirskii**,
eggs encapsulation, parasites, *Saissetia oleae* 5175
- Metaplatybanus hypoleucus**,
taxonomy, morphology 15.
- Metapolybia azteca**,
nesting behavior, habitat selection, Costa Rica 7800
- Metataphium anisopliae**,
pathogenicity, mortality, biological control, *Nasutitermes exitiosus* 8165.
pathogens, disease transmission, *Reticulitermes* 8153.
pathogens ingestion, pathogenicity, *Reticulitermes* 8150
pathogens, pest control, *Oryctes rhinoceros*, Western Samoa 5348
pathogens, vectors, *Hylobius pales* *Macrocheles*, *Histiogaster anops* 6047
pathogens, vectors, parasites, *Macrocheles*, *Hylobius pales* 4207
virulence, pathogenicity, geographical variations, *Culex pipiens pipiens* 8161.
- Metarrhizium anisopliae**,
biological control pathogens, fungicides effects on, *Curculio caryae* 1402.
pathogens, *Telegonyia commodus*, Australia, Victoria 1003.
- Metarrhizium anisopliae**,
pathogens, larvae susceptibility, *Anopheles stephensi*, disease transmission 654.
- Metastelium occidentalis**,
pesticide resistance, aryl carbamate insecticides, inheritance, genetic factors
pesticide resistance, genetics, biochemical characteristics, insecticides, aryl carbamates 4688
pesticide resistance, rearing methodology, hosts 8863.
predator-prey interactions, biological control, *Tetranychus urticae* 8709
predators, microorganisms association 8170.
sulfur resistance, inheritance, population genetics 5493
- Metatelsa**,
taxonomic revision, morphology 838.
- Metatelsa allopheodes**,
new species, morphology 838.
- Metatelsa diakonoffi**,
new species, morphology 838.
- Metatelsa lepta**,
new species, morphology 838.
- Metatelsa pemphigodes**,
new species, morphology 838.
- Metatelsa pithana**,
new species, morphology 838.
- Metatelsa platypiera**,
new species, morphology 838.
- Metatelsa rhabdota**,
new species, morphology 838.
- Metatelsa symphylos**,
new species, morphology 838.
- Metatrichia**,
morphology, keys, species, Israel 5650.
- Metacalla pruinaea**,
life history, immature stages, laboratories 1985.
new records, geographical distribution, morphology, genitalia, Palearctic Region 4715.
- Metatelozygus**,
sex pheromone application, pest control, *Pectinophora gossypiella* 4596
- Metamorphosis**,
toxicity, larvae, streams, *Insecta* 315.
toxicity, *Myzus persicae*, *Coleomegilla maculata lengi*, *Chrysopa oculata* 318.
- Methidathion**,
insecticides, toxicity, *Aonidiella aurantii* 5048.
toxicity, parasitoids, *Aonidiella aurantii* 9020.

Methionine,diets, metabolism, *Agria housei* 3319.**Methocarbamol**,biases treatment, venom, *Latrectus* 1319.**Methodology**,separation techniques, developmental stages, *Culicidae* 69.**Methylomyl**,insecticides, chemical control, pesticide residues, *Spodoptera frugiperda* 5416.insecticides, pest control, mortality, eggs, larvae, *Heliothis punctiger*,*Heliothis armiger* 5380.insecticides, synergists, piperonyl butoxide, MGK 264, DEF, mortality, *Spodoptera**litoralis* 9023insecticides, toxicity, *Phyllonorycter blancardella*, *Apanteles ornigis* 8200.toxicity, nontarget organisms, *Heliothis*, predators 8172.**Methoprene**,binding, hemolymph proteins, larvae, *Diatraea grandiosella* 207.toxicity, *Autographa californica* nuclear polyhedrosis virus virulence, pest control,*Heliothis virescens* 6967effects on development, castes differentiation, *Prothionotermes simplex* 6647.effects on fecundity, fertility, *Cydia pomonella* 8236.effects on reproduction, *Dendroctonus frontalis* 383.growth regulators, pests, chemical control, bioaccumulation, cattle, *Haematobia**irritans* 4520.juvenile hormones analogs, pest control, *Lesioderma serricorne*, *Ephesia elutella*

8579.

juvenile hormones, effects on emergence, control programs, *Culex**quinquefasciatus*, *Anopheles stephensi*, *Aedes aegypti* 1360.**Methotrexate**,disposition, gut, ovary, toxicity, *Bracon hebetor* 8198.toxicity, effects on protein biosynthesis, egg production, *Bracon hebetor* 8203.**12-Methoxyabietic acid**,feeding behavior deterrents, host plants, *Pristiphora erichsonii* 623.**6-Methoxybenzoazolinone**,bioaccumulation, pest resistance methodology, *Zea mays*, *Ostrinia nubilalis* 8851indicators, pest resistance, *Zea mays*, *Ostrinia nubilalis* 6099.**Methyl bromide**,disinfection, apiculture, *Bacillus larvae*, *Ascophaera apis* 8527.fumigants, resistance, metabolism, *Stiophium granarius* 1061.fumigation, mortality, wood, *Ulmus*, *Scolytus multistriatus* 8491.phosphine, fumigation, pests, stored products, *Tribolium castaneum* 6627.toxicity, *Drosophila melanogaster* 5031.toxicity, 7 species, *Coleoptera* 1073.**Methyl methanesulfonate**,clastogenicity, *Drosophila melanogaster* 9413.**Methyl parathion**,effects on, pest outbreaks, *Nilaparvata lugens* 307.insecticides, effects on, *Nilaparvata lugens* 306.insecticides, pesticide resistance, *Heliothis virescens* 4221.insecticides, toxicity, *Anthonomus grandis grandis* 9026.pesticide resistance, pyrethroids susceptibility, *Heliothis virescens* 8201.pesticide resistance, selection, *Heliothis virescens* 8667.pesticide resistance, susceptibility, insecticides, pyrethroids, *Heliothis**virescens*, USA, South Carolina 4226.toxicity, chemical control, *Heliothis virescens* 4635.toxicity, *Insecta* 1830.**N-Methyl-N'-nitrosoquinidine**,use, clastogenicity methodology, embryos, *Chortophaga viridifasciata* 9412.**Methyl-para-hydroxy benzoate**,microbiological activity, effects on survival, eggs, *Schistocerca gregaria*, *Locusta**migratoria migratorioides* 5821.**2-Methyl-1,5-benzoquinone**,*Tribolium* secretions, effects on erythrocytes, rats 6617.**Methylation**,DNA, RNA biosynthesis, polytene chromosomes, *Sciara coprophila* 7833.diets, effects on choline, nervous system, *Musca domestica* 4076.**Methylcyobexanol**,attractancy, *Blattella germanica* 2593**Methylmercury**,pollution effects, bioaccumulation, *Calliphoridae* 7354.**Methylmethanesulfonate**,effects on chromosomes, lesions, males, *Drosophila melanogaster* 6264.hypersensitivity, chromosome 3, mutants, *Drosophila melanogaster* 3097.*Methylthiadenosine nucleoside phosphorylase*,kinetics, *Drosophila melanogaster* 179.**Metioptera brachyptera**,

karyotypes, evolution, phylogeny 1567

Metocus paradoxus,

geographical distribution, life history 5517.

Metopolophium,pest resistance, cultivars, *Triticum* 8567.**Metopolophium dirhodum**,

barley yellow dwarf virus, effects on secretion, honeydew 4617.

epidemiology, pest outbreaks, population dynamics, *Stibion avenae*, *Triticum*

4393

flight activity, phenology, migrations 6826.

host plants pest resistance, *Triticum aestivum* 2986.larvae development, host plants effects on, pest resistance, *Triticum aestivum*

2840

natural enemies, effects on population dynamics, British Isles 8394

parasites, abundance, *Hymenoptera* 1228.pests, effects on plants, *Triticum aestivum* 548.

population status, crop fields, British Isles 6927.

predation, natural enemies, effects on population levels, British Isles 8389.

Metopolophium festucae,

population status, crop fields, British Isles 6927.

predation, natural enemies, effects on population levels, British Isles 8389.

Metrichia thyrasae,

new species, taxonomy, morphology, Chile 7243.

Metriorhynchus rhipidius,

antefedants, repellents, chemical composition, mimicry 1785

Metrogaleruca obscura,parasites, biological control, weed control, *Cordia curassavica*, Malaysia 2960**Metrosideros collina polymorpha**,host plants, damage, *Insecta*, USA, Hawaii 5202hosts, stress, host selection, ecology, life history, oviposition, *Plagithmysus*

- Metrouideros collina polymorpha**, (continued)
bilineatus, USA, Hawaii 1961.
- Metzeria aprilella**,
emergence, host plants, parasites 5140.
- Mesico**,
apiculture, pesticides effects on, *Apis mellifera* 3810.
forest floor leaf litter, association, *Collembola* 2167.
hives, infestation, *Acarapis woodi*, *Apis mellifera* 6181.
morphology, taxonomy, new records, *Friesia* 4820.
new genera, taxonomy, *Hulechius* 4784.
new records, geographical distribution, *Friesia sublimis* 8781.
new records, geographical distribution, *Monobia quadridens* 2369.
new species, geographical distribution, *Aradidae* 31.
new species, new genera, *Epicermes atezcus* 8743.
new species, taxonomy, morphology, *Gisus* 6426.
new species, taxonomy, morphology, *Delostethus scutellus* 3980.
new species, taxonomy, morphology, *Esenbeckia biclausa*, *Esenbeckia hirsutipalpus* 7965.
new species, taxonomy, morphology, *Filistata brigolii* 8733.
new species, taxonomy, morphology, *gyponana impeta* 4017.
new species, taxonomy, morphology, *Lageria orizabensis*, *Impatiensidum americanum* 4863.
new species, taxonomy, morphology, *Neotilia* 4702.
new species, taxonomy, morphology, *Pseudaphycus debachi* 2446.
new species, taxonomy, morphology, *Sticticia gillaspiei* 8827.
new species, taxonomy, morphology, *Thermonectus sibolyi*, *Thermonectus zimmermani* 7953.
new species, taxonomy, morphology, *Trepobates polheimi* 5578.
new species, taxonomy, morphology, *Urosigalphus yucatanensis*, *Urosigalphus meridianus* 5599.
new species, taxonomy, morphology, 3 species, *Ambrysus* 6416.
new species, *Tricorynus dudleyae*, *Tricorynus fuliginosus*, *Byrrhodes ovanus* 2400.
nontarget organisms, pest control, *Cochliomyia hominivorax* 2206.
pathogens, *Isopora*, *Cordycepsoides octosporus* 2626.
reviews, check lists, species composition, keys, geographical distribution, *Ecitoninae* 9500.
species composition, geographical distribution, keys, *Ecitoninae* 6325.
taxonomic revision, synonymy, *Lynchuchoides frappaenda*, *Atrytonopsis* 7994.
- Mexico, Baja California**,
geographical distribution, occurrence, *Polyphylla* 5532.
- Mexico, California Gulf**,
new species, taxonomy, morphology, *Paraleucopsis mexicana* 2425.
- Mexico, Jalisco**,
new species, taxonomy, morphology, *Colaspis chapalensis* 8769.
- Mexico, Morelos**,
new species, taxonomy, morphology, *Friesia hoffmannorum* 8781.
- Mexico, Sinaloa, Mazatlan**,
interspecific relationships, host plants, defoliation, *Canna edulis*, *Calpodes ethlius* 5967.
- Mexico, Socorro Island**,
Anaethus bogueti, taxonomy, new species, morphology 1607.
- Mexico, Sonora, Kino Bay**,
ecology, habitat, *paraleucopsis mexicana* 2884.
- Mexira guanaecensis**,
new species, taxonomy, morphology, Central America 7978.
- Mexira hondurensis**,
new species, taxonomy, morphology, Central America 7978.
- Mexira paratropicalis**,
new species, morphology, Mexico 31.
- Mexira proxima**,
new species, taxonomy, morphology, Central America 7978.
- Mexira smithi**,
new species, taxonomy, morphology, USA, Georgia 8810.
- Mice**,
immunization, sensitivity, infection, Venezuelan equine encephalitis virus, *Aedes aegypti* 7626.
pest resistance, allografts, *Polyplax serrata* 5275.
- Michaelinae**,
taxonomy, morphology 7145.
- Michotamia indiana**,
new species, taxonomy, morphology, India 7179.
- Microtheca gracilis**,
webs, orientation, solar radiation, effects on, thermoregulation 1918.
- Micreremus subglaber**,
new species, taxonomy, morphology, Japan 5519.
new records, geographical distribution, habitat, British Isles, Berkshire 6313.
- Microbiological activity**,
methyl-para-hydroxy benzoate, effects on survival, eggs, *Schistocerca gregaria*, *Locusta migratoria migratorioides* 5821.
- Microbodies**,
nucleoids, heterogeneity, *Aldrichina grahami* 881.
- Microceroterpes besoni**,
colonies, brood care, population density, seasonal variations, India 5418.
lipid composition, castes 7716.
- Microclimate**,
environmental factors, ecological distribution, edge effect, *Schizocosa ocreata* 1236.
host plants, spatial distribution, pests, population levels, *Aonidiella aurantii*, *Grocco*, Crete 1236.
- Microcory phia**,
collections, taxonomy, morphology 7242.
- Microctonus aethiopoides**,
parasites, temperature requirements, development 391.
- Microctonus vittatus**,
parasites, effects on hosts emergence, *Phyllostreta cruciferae*, *Phyllostreta striolata* 8316.
- Microculex**,
taxonomic revision, morphology, keys 6408.
- Microdon**,
taxonomy, morphology, synonymy, keys, adults, pupae 2427.
- Microdon abditus**,
taxonomy, morphology, new species 2427.
- Microdon abstrusus**,
taxonomy, morphology, new species 2427.
- Microdon adventitius**,
taxonomy, morphology 2427.
- Microdon fuscipennis**,
biology, sex ratio, emergence, predation, sexual reproduction, adults, larvae, pupae 2778.
- Microdites**,
new species, new records, taxonomy, Nepal 18.
- Microdites lomskamii**,
new species, new records, taxonomy, Nepal 18.
- Microflora**,
enzymatic activity, nitrogen metabolism, *Nasutitermes exitiosus*, *Coptotermes lacteus* 233.
gut, aerobes, mutualism, bacteria, *Orthoporus ornatus*, *Comanichelus* 8308.
gut, fungi, *Myrnapoda* 8306.
gut, putrescine biosynthesis, hemolymph, *Heliothis zea* 5684.
gut, yeasts, diets, feeding behavior, *Drosophila* 5917.
- Microgasterinae**,
check lists, species composition, taxonomy, zoogeography, synonymy, new records, geographical distribution, Hungary 8687.
- Microgasterinae**,
phylogeny, taxonomic revision, reclassification, new genera, new species 6437.
- Microlepidoptera**,
check lists, new records, geographical distribution, Sweden 4722.
check lists, rare species, new records, geographical distribution, Sweden 4723.
geographical distribution, occurrence, Inner Hebrides Is 6315.
new records, geographical distribution, Hungary 8684.
new records, geographical distribution, Sweden 7085.
new records, occurrence, British Isles 9448.
new species, taxonomy, morphology, Norfolk I 4041.
occurrence, new records, bogs, peatlands, Czechoslovakia 9481.
population decline, species composition, British Isles, England, Sussex, Abbot's Wood 9219.
rare species, Denmark 5515.
- Micromethoda**,
injection, nuclei, eggs, *Drosophila* 8850.
- Microtus tasmaniae**,
development, temperature threshold 1111.
- Microtus timidus**,
geographical distribution, range extension, India 7111.
- Microtus minutus**,
disease transmission, vectors, tick-borne encephalitis virus, survival, *Haemaphysalis inermis* 4491.
nests, entomofauna, *Siphonaptera* 460.
- Micronesia**,
morphology, *Heteromurus tetracanthus*, *Heteromurus tenuicornis* 3988.
- Micronesia, Yap I.**,
new species, taxonomy, morphology, *Haplacaricus pandanus* 3965.
new species, taxonomy, morphology, *Haplacaricus pandanus* 8717.
- Microorganisms**,
association, predators, *Metasevelus occidentalis* 8170.
contamination, honey, physicochemical properties 8503.
cuck, metabolism, insecticides, dielidia, *Calliphora erythrocephala* 5799.
effects on oviposition stimulation, *Hyemys antiqua* 1136.
effects on survival, eggs, *Schistocerca gregaria*, *Locusta migratoria migratorioides* 5821.
food availability, effects on larvae survival, tree holes, *Aedes triseriatus* 4478.
food organisms, labelling, tyrosine metabolism, *Aedes aegypti* 170.
host plants seedlings, oviposition stimuli, *Hyemys antiqua* 5860.
pathogens, disease resistance, *Insecta* 7370.
role, sterility, *Heliothis subflexa* × *Heliothis virescens* 3501.
symbols, factors affecting abundance, mycetome, *Glossina* 5173.
symbols, transmission (sexual), *Rhazopertha dominica* 7536.
yeasts, symbiosis, isolation, *Nilaparvata lugens* 1215.
- Micropezidae**,
taxonomy, morphology, keys, South America, Amazon R. Basin 4830.
- Microplasma**,
phyllody, disease transmission, plant diseases, *Neolaurus fenestratus* 8467.
- Microplitis croceipes**,
parasitoids, competition, *Heliothis virescens* 2811.
parasitoids, kauremones, host plants effects on, *Heliothis zea* 2824.
- Micropectra**,
geographical distribution, zoogeography 7974.
- Micropterigidae**,
taxonomic revision, Spain, Iberian Peninsula 2467.
- Microptera**,
sampling, rearing, methodology, British Isles, England 4919.
- Microsania straeleni**,
new records, geographical distribution, British Isles 5510.
- Microseleus curvicaudatus**,
parasites, incidence, *Phthorimaea operculella*, Australia, Queensland 2828.
- Microscopy**,
methodology, anatomy, muscles, exoskeleton, *Apis mellifera* 8056.
- Microscydes minimus**,
new records, geographical distribution, habitat, British Isles, Berkshire 6313.
- Microsome**,
aldur epoxide, induction, host plants, *Spodopora frugiperda* 5712.
centrifugation, isolation, oxidases, *Insecta* 5623.
cytochrome P-450, binding, substrate specificity, *Musca domestica* 6561.
cytochrome P-450, ligands, binding, *Musca domestica* 6554.
enzymatic activity, comparison, strains, *Tribolium castaneum* 3326.
enzymes, oxidases, activity, seasonal variations, *Scaptomyza alectus*, *Scaptomyza vicinus* 5694.
growth regulators, metabolites, fluorescence, cytochrome P-450, *Musca domestica* 5693.
oxidase system characterization, juvenile hormones degradation, *Musca domestica* 8058.
- Microsporidia**,
pathogens, infectivity, virulence, *Aedes aegypti* 8127.
pathogens, larvae, *Simuliidae* 1018.
pathogens, transmission (vertical), infection effects on fecundity, *Aedes aegypti* 8129.
- Microsporidiosis**,
persistence, biological control, *Nosema pyrausta*, *Vairimorpha necatrix*, *Ostrinia nubilalis* 8495.

- Microsporidium**, infection, pathogens, larvae, Simuliidae 1018.
- Microsurgery**, DNA purification, polytene chromosomes, *Chironomus* 8621.
- Microtenidipes pedellus**, heads capsules, ultrastructure, silk spinning 104.
- Microtermes obei**, crop fields damage, irrigation, fertilizer applications effects on, *Triticum* 5372.
- crop fields damage, pest control, crop rotation 5373.
- pest control, insecticides, *Triticum* 5371.
- pests, chemical control, insecticides, seed treatments, *Triticum*, India 5398.
- Microterys flavus**, hyperparasitism, *Cheloneurus parala* 5185.
- hyperparasitism, *Manetta javensis* 5184.
- hyperparasitism, *Pachyneuron concolor* 5177.
- Microtrambicula tanzaniae**, new species, taxonomy, morphology, Tanzania 6344.
- Microtubules**, chromosomes, localization, *Lepidoptera* 3079.
- chromosomes, meiosis, *Drosophila melanogaster* 3893.
- epithelium, ultrastructure, *Thysanura* 4117.
- spermatzoa, ultrastructure, locomotion, *Aedes notoscriptus* 105.
- stability, dissection methodology, *Insecta* 106.
- Microtus canaliculatus**, hosts, parasites population dynamics, *Ixodidae* 6777.
- Microvelia strolemeata**, predators, insecurities effects on, pest control, *Nilaparvata lugens* 6162.
- Microvillus**, arylamidases, digestion, proteins, *Mdgit*, *Rhynchosciara americana* 6545.
- growth, malpighian tubules, 5-hydroxytryptamine effects on, *Rhodnius prolixus* 162.
- Microwave radiation**, effects on foraging behavior, flight activity, *Apis mellifera* 5877.
- effects on longevity, food consumption, *Apis mellifera* 7502.
- pest control, *Insecta*, fumigation, botanical specimens 2198.
- pest control, stored products, *Insecta* 3784.
- stored products pest control, methodology, *Rhyzopertha dominica*, *Strophilus oryzae* 3793.
- Microzetes**, new species, Greece 7142.
- Midamus hecabe**, morphology, larvae, pupae 8873.
- Mdgit**, aminopeptidase, cathepsin, proteinase, isolation, characterization, *Cimex hemipterus*, *Cimex lectularius* 8950.
- arylamidases, digestion, proteins, *Rhynchosciara americana* 6545.
- cells, endocrine function, exocytosis, secretions, granules, *Periplaneta americana* 8077.
- endocrine system cells, ultrastructure, *Blattaria* 101.
- enzymatic activity, ion transport inhibitors effects on, *Glossina morsitans* 4994.
- enzymatic activity, proteolytic enzymes, *Haemaphysa irritans* 2551.
- enzyme activity, blood meals, *Haemaphysa irritans*, *Stomoxys calcitrans* 5676.
- enzyme activity, digestion, larvae, *Rhynchosciara americana* 6546.
- epithelium, cells, response, blood meals, digestion, *Culex tarsalis* 6547.
- epithelium, L-canavanine effects on, *Manduca sexta* 4391.
- epithelium, morphogenesis, *Pedotenus unimaculatus* 3309.
- epithelium, phagocytosis, *Tenebrio molitor* 103.
- extracts, cardiotoxins, *Mollusca*, larval, *Phouris* 9018.
- fluids adsorption, diuresis, *Rhodnius prolixus* 5679.
- larvae, histochemistry, *Manduca sexta* 188.
- muscles, anatomy, histology, *Bombyx mori* 2550.
- muscle receptors, biodynamic, ekekephalin analogs, *Leucophaea maderae* 8911.
- pathology, infection, *Leishmania aethiopica*, *Phlebotomus pedifer* 8157.
- peritrophic membrane, membrane structure, histochromy, *Thrips validus* 7312.
- permeability, cardiac glycoside, *Oncopeltus fasciatus*, *Schistocerca gregaria*, *Periplaneta americana* 7310.
- pH, infection effects on, *Bacillus thuringiensis*, *Aedes aegypti* 3423.
- pharmacokinetics, active transport, thallium inhibition, *Hyalophora cecropia* 8074.
- potassium transport, larvae, reviews, *Lepidoptera* 8081.
- radiation, effects on structure, histology, *Dacus dorsalis* 7359.
- ultrastructure, embryogenesis, *Clitumnus extradentatus* 4247.
- Migrants**, occurrence, *Lepidoptera*, *Eire*, Cork Co. 9453.
- Migration**, effects on development energetics, *Oncopeltus fasciatus*, *Lygaeus kalmi* 2783.
- flight activity, fat body lipid biosynthesis, *Chortocetes terminifera* 2557.
- hemolymph, lipid composition, *Danaus plexippus* 2566.
- navigation behavior, role, light polarization, *Corixidae* 2857.
- parasites, host tissues, *Culebra fontinella*, *Peromyscus leucopus* 2832.
- Migrations**, adaptations, ecophysiology, *Leptinotarsa decemlineata* 7608.
- autumn, range, *Syrphidae*, Switzerland 9169.
- climatic conditions effects on, *Nilaparvata lugens* 562.
- deserts, population genetics, *Drosophila*, USA, California, Death Valley 6814.
- diurnal variations, temperature simulation, laboratories, *Haemaphysa irritans* 1684.
- effects on pesticide resistance development, malathion, *Culex pipiens* 319.
- environmental conditions, *Frontopsylla frontalis* 9147.
- feeding behavior, nymphs, *Desmoria bethula*, USA, California, Sagehen Creek 3868.
- flight activity, phenology, *Rhopalosiphum padi*, *Sitobion avenae*, *Metopolophium dirhodum* 6826.
- flight activity, radar, *Persectania ewingii*, *Heliothis punctiger*, *Agrotis munda*, Australia, Bass Strait 1264.
- flight, capture-recapture studies, *Syrphidae*, Switzerland 9170.
- life cycle, pests, *Zonocorus variegatus*, Nigeria 8481.
- locomotor activity, diel variations, light intensity, feeding behavior, *Nemobius sylvestris* 153.
- locomotor activity, pests, infestation, environmental conditions, *Mythimna separata* 1170.
- occurrence, *Lepidoptera*, British Isles 9449.
- occurrence, *Lepidoptera*, *Eire* 7885.
- pests, wind dispersal, *Homoeosoma electellum* 2100.
- pigments, coloration, role, ATP pyrophosphatase, *Carausius morosus* 3363.
- pigments, compound eyes, light effects, *Myndus crucei* 3297.
- pigments, compound eyes, light intensity, *Insecta* 4139.
- Migrations, (continued)**
- population dynamics, thermoregulatory behavior, *Danaus plexippus* 6846.
- species composition, *Syrphidae*, Switzerland, Munt La Schera 6815.
- swarms, community composition, *Pieris rapae*, *Pieris napi*, *Vanessa cardui*, *Syrphus*, Poland Coast 5212.
- symbiosis, bacteria, *Pediculus humanus* 4366.
- synchronization, seasons, diapause, *Insecta* 8359.
- synoptic-scale wind systems, *Phoebastria senae*, *Urbanus proteus*, *Agraulis vanillae*, *Precis coenia*, USA, Florida 5978.
- Milbemycin**, toxicity, resistance, *Tetranychus urticae* 1838.
- Milbemycin**, toxicity, *Tetranychus urticae*, *Panonychus citri* 2662.
- Milk**, secretion, biosynthesis, juvenile hormones effects on, *Diploptera punctata* 2589.
- Milk gland**, activity, mating effects on, *Glossina austeni* 8229.
- Milk production**, glands, histochemistry, *Melophagus ovinus* 3389.
- Milky disease**, pathogenesis, *Insecta* 7373.
- pathogens, infectivity, *Scarabaeidae*, *Aphodius tasmaniae* 624.
- Mimastis**, new records, geographical distribution, Iberian Peninsula 7078.
- Mimicry**, aggressive behavior, coloration, *Saitis piscular* 5150.
- bioluminescence, interspecific relationships, predation, *Phouris* 1303.
- bitter principle, antifeedants, *Metricorythrus rufidus* 1785.
- coloration, predation, *Parus major*, *Lycaeus equestris* 9214.
- growth rate, survival, population studies, *Lepidoptera* 7611.
- wings morphology, predation effects on, *Lycaenidae* 2786.
- Mimulus**, juvenile hormones, effects on oogenesis, *Labidura riparia* 1116.
- juvenile hormones, faecesol, effects on vitellogenesis, *Labidura riparia* 1118.
- sex pheromone, effects on activity, *Periplaneta americana* 1923.
- sex pheromone, electroantennograms, sex differences, *Periplaneta americana* 970.
- Mimosestes americanus**, temperature effects on respiration, fecundity, development 8224.
- Mindarus abietinus**, pests, life history, chemical control, damage, host plants, USA, North Carolina 4336.
- Minerals**, eggs, shells, *Phasmdia* 6633.
- nutrient uptake, digestive tract, diets, *Schistocerca gregaria* 2552.
- Mines**, reclaimed land, recolonization, plant communities, *Arthropoda* 6048.
- Mining**, land reclamation, autecology, soil fauna, *Oppiella nova*, *Mixochthonius lateipes*, British Isles, England 8597.
- Miniopterus**, parasites, new records, new species, *Calamymybia*, Africa 4766.
- Mimix mexicana**, new records, geographical distribution, ecological distribution, USA 2368.
- Minotocypus**, taxonomic revision, *Ceropalinae*, *Pompiilinae* 8826.
- Minotocypus eximius**, new species, taxonomy, morphology, Oriental Region 8826.
- Minotocypus flavifrons**, new species, taxonomy, morphology, Oriental Region 8826.
- Minotocypus obscurus**, new species, taxonomy, morphology, Oriental Region 8826.
- Minotocypus rufus**, new species, taxonomy, morphology, Oriental Region 8826.
- Minotocypus sericans**, new species, taxonomy, morphology, Oriental Region 8826.
- Minotocypus tubercosus**, new species, taxonomy, morphology, Oriental Region 8826.
- Minuartia groenlandica**, host plants, pollination, *Diptera*, *Hymenoptera*, USA, New Hampshire, Mount Washington 5974.
- Mimymischa**, new genera, taxonomy, morphology, keys, species 6441.
- Miocene**, fossils, host plants, leaf miners, *Mahonia reticulata* 4751.
- Mirabilis nyctaginea**, host plants, range extension, host-parasite interactions, *Catorhintha mendica*, USA, East Coast 4397.
- Mirex**, chemical control, effects on association, *Formicidae*, *Diatraea saccharalis* 609.
- Miridae**, association, abundance, phenology, host plants, *Ceanothus crassifolius* 5953.
- collections, British Isles, British Museum of Natural History 4753.
- new records, geographical distribution, USA, Florida 5534.
- taxonomy, synonymy 5581.
- Mirperus jactatus**, parasitoids, pests, *Clavigralla tomentosicollis*, Africa 2814.
- Misagria**, taxonomy, new species, morphology, Venezuela 3228.
- Mischocyttarus drewseni**, sternal gland, anatomy 5717.
- sternal gland, epidermis cells, histology 5015.
- Mischocyttarus flavitarsis**, sternal gland, anatomy 5717.
- sternal gland, epidermis cells, histology 5015.
- Mischocyttarus mexicanus**, sternal gland, anatomy 5717.
- sternal gland, epidermis cells, histology 5015.
- Mischocyttarus americanus**, ecological distribution, nesting behavior, habitat 5991.
- Mischocyttarus sloosiae**, ecological distribution, nesting behavior, habitat 5991.
- Mischocyttarus sloosiae**, ecological distribution, nesting behavior, habitat 5991.
- Mischocyttarus mendocinus**, new genera, new species, taxonomy, morphology, Brazil 6354.

- Misolampidius clavicrus**, taxonomy, morphology, synonymy, *Misolampidius okumurai* 8773.
- Misolampidius okumurai**, taxonomy, morphology, synonymy, *Misolampidius clavicrus* 8773
- Misumena vatia**, predation, food preferences, host plants effects on 457
- Mitochondria**, calcium regulation, mutants, *Drosophila* 8646
- catalyase degradation, synthesis, fat body, diapause, *Heliothis zea* 5818
- DNA, restriction endonuclease mapping, *Drosophila melanogaster*, *Drosophila virilis* 3875
- flight muscle, age effects on, *Musca domestica* 322
- flight muscle, enzymatic activity, ATP pyrophosphatase, *Musca domestica* 945
- flight muscle, lipid composition, temperature effects on, *Schistocerca gregaria* 8105
- flight muscle, protein biosynthesis, *Calliphoridae* 2567
- flight muscle, temperature effects on lipid composition, phase transition, *Schistocerca gregaria* 5709
- inhibition, ovary, diterpenoids, *Rabdosa*, *Macrotermes subhyalinus* 2556
- locomotion, malpighian tubules, 5-hydroxytryptamine effects on, *Rhodnius prolixus* 162
- malpighian tubules, kynurenine 3-hydroxylase, activity, mutants, *Ephestia kuehniella* 6566
- muscles, enzymatic activity, ATP pyrophosphatase, energy resources, *Musca domestica* 950
- ovary, enzymatic activity, kynurenine 3-mono-oxygenase, *Ephestia kuehniella* 3317
- respiration, enzymatic activity, electron transport, inhibitors effects on, *Musca domestica* 953
- respiration, recessive mutation, effects on enzymes, *Drosophila melanogaster* 5479
- ribosomal proteins, fractionation, electrophoresis, *Locusta migratoria* 3265
- salivary gland, histology, ATP levels, *Chironomus tentans* 4952
- Mitonyssus**, new genera, parasites, morphology, Chiroptera, South America 10.
- Mitonyssus molossinus**, new species, parasites, *Molossus molossus*, South America 10.
- Mitonyssus noctilio**, new species, parasites, *Noctilio labialis*, South America 10.
- Mitopus ericaeus**, new species, taxonomy, morphology, British Isles 8740.
- Mitopus morio**, new records, geographical distribution, habitat, Eire 6311.
- Mitosis**, differentiation, wing discs, *Drosophila* 1084.
- inhibition, wing discs, γ -radiation effects on, *Drosophila melanogaster* 1106.
- quantitation, embryology, *Calliphora erythrocephala* 1078.
- recombination, mutation, patterns duplication, compartmentation, *Drosophila* 1522.
- Mitosynum**, new genera, taxonomy 7935.
- Mitosynum vockerodhi**, new species, taxonomy, morphology, Canada, New Brunswick 7935.
- Mitotic exchange**, chromosome aberrations, heterochromatin, *Drosophila melanogaster* 6256.
- Mixochthonius laticeps**, soil fauna, autoecology, mining land reclamation, British Isles, England 8597.
- Mobility**, flight, diurnal variations, *Helicoverpa armigera* 6693.
- hives, apiculture, production 2978.
- Mochlonys**, keys, morphology 8791.
- Mochlonys triangularis**, new species, taxonomy, morphology 8791
- Modeling**, computer programs, pest control, *Insecta* 3016.
- Modiocyrtus**, pest outbreaks, India, Meghalaya 7694.
- Modification**, secondary structure, chloroacetaldehyde, tRNA, nucleotide sequence, *Drosophila melanogaster* 4647
- traps, attraction, *Glossina* 4074
- Modulators**, neurophysiology, octopamine, reviews, *Insecta* 4127.
- Moganna minuta**, pest outbreaks, life tables, crop fields, *Saccharum officinale*, Okinawa 6109
- Molna affinis**, population regulation, predators, ponds, *Chaoborus* 8616
- Moisture**, absorption, eggs, survival, *Anacridium aegyptium* 6849
- effects on fishery products infestation, *Suidasia medanensis* 2948
- effects on population dynamics, *Stomoxys calcitrans* 2148
- effects on population dynamics, *Stomoxys calcitrans* 7606
- Mokrzeckia**, taxonomy, keys 35
- Mokrzeckia menzeli**, new species, morphology, geographical distribution, Asia 35
- Molluscs**, transmission, role, *Neolaiturus fenestratus*, *Carthamus tinctorius* infection 5346
- Molt**, cardiorespiratory, hemolymph, midgut, extracts, larval, *Photinus* 9018
- Molossus molossus**, hosts, parasites, *Mitonyssus molossinus*, South America 10
- Molting**, activity patterns, stereotyped behavior, *Rhodnius prolixus* 4340
- behavior, neurophysiology, abdomen, rhythms, *Schistocerca* 3278
- chitin biosynthesis, epidermis 5657
- cuticle, hormones interaction effects on, *Manduca sexta* 3493
- cuticle physical properties, hormones effects on, *Schistocerca gregaria* 2517
- Dermacenter albipictus, timing 1885
- development, hormones, *Rhodnius prolixus* 5002
- development, hypopharyngeal, *Hemiscarabus coccophagus* 7435
- development, monitoring methodology, *Ostrinia nubilalis* 4271
- developmental stages, cuticle excretions, *Oniscus asellus* 4273
- developmental stages, pharate condition, pupae, *Tipula paludosa* 4249.
- ecdysone hormone role, activity patterns, *Manduca sexta* 7431
- effects of precocene II, larvae, *Rhodnius prolixus* 364
- effects on phenonemes catabolism, enzymatic activity, *Trichoplia* ni 227
- Molting, (continued)**
- effects on toxicity tests methodology, insecticides, *Heliothis virescens*, *Heliothis zea* 3429.
- embryos, scanning electron microscopy, *Oncopeltus fasciatus* 868.
- environmental effects, temperature, humidity, larvae, *Ixodidae* 1175.
- enzymatic activity, chitinase, *Manduca sexta* 1766.
- epidermis, protease, kinase, cyclic nucleotides, *Melanophila sanguinipes* 6518.
- fat body, ultrastructure, physiology, *Hypogastera tulbergi* 4281
- glands, histology, *Nematus incerta*, *Scodra calceata*, *Legedrella pauliani* 258.
- glands, sensitivity, juvenile hormones analogs, cell death, *Oncopeltus fasciatus* 8245
- hibernation, reproduction, feeding behavior, *Lagynochthonius myricus* 5251
- hormones, β -ecdysone, effects on physiology, follicles, *Carusius morosus* 4263
- hormones, binding, vitellin, eggs, *Locusta migratoria* 3515
- hormones, bioaccumulation, steroids, ovary, *Bombyx mori* 210.
- hormones, characterization, larvae, *Oncopeltus fasciatus* 2582
- hormones, developmental stages, carbon dioxide effects on, *Locusta migratoria cinerascens* 3341
- hormones, diets, effects on development, *Musca domestica* 7463
- hormones, ecdysone, analogs, biological activity, *Culicidae* 5003.
- hormones, ecdysteroids hemolymph instars, *Manestra brassicae* 7327
- hormones, ecdysone, effects on vitellogenesis, oogenesis, *Aedes aegypti* 5088.
- hormones, embryogenesis, diapause, *Bombyx mori* 3463
- hormones, integument structure, nymphs, *Onchodonta moutata* 3340
- hormones, ovoviviparity, embryogenesis, morphology, *Nauphoeta cinerea* 3514
- hormones, plasma levels, development, *Locusta migratoria cinerascens* 4163
- hormones, Precocene II, development, larvae, *Rhodnius prolixus* 1882
- hormones, radioimmunoassay, developmental stages, *Choleva angustata* 205
- hormones, radioimmunoassay, larvae, *Sarcophaga bullata* 2717.
- hormones regulation, larvae, *Laspeyresia poinellana* 1119
- hormones, role, coloration, developmental stages, *Sarcophaga bullata* 3361
- hormones, vitellogenesis, oogenesis, *Onchophora stephensi* 3511
- hormones, 20-hydroxy-ecdysone, protein biosynthesis, vitellogenin, males, *Sarcophaga bullata* 3367
- hydrocarbons, sexual dimorphism, *Drosophila melanogaster* 943
- 20-hydroxyecdysone effects on, *Armadiellum vulgare* 370
- inhibition, pest control, *Insecta* 9287
- inhibition, toxicity, 2-acetylpyridine thiosemicarbazones, topical applications, *Oncopeltus fasciatus* 5786.
- inhibitors, azadirachtin, pest control, *Lepidoptera* 9333.
- inhibitors, host plants, *Lepidoptera*, *Ajuga remota* 4274
- inhibitors, toxicity, *Choristoneura occidentalis* 9031
- juvenile hormones, fat body ultrastructure, vitellogenesis, *Sarcophaga bullata* 2721
- larvae, benzamide effects on, *Stomoxys calcitrans* 1128.
- larvae, ecdysteroids effects on, *Bombyx mori* 2722.
- larvae, food plants effects on, *Diactisia obliqua* 7561.
- larvae, role, hormones, *Lepidoptera* 2691
- larvae, temperature, humidity effects on, *Amblyomma americanum* 1860
- life cycle, *Choristoneura occidentalis*, IWA, Washington 7519
- metamorphosis, epidermis cell cycle, *Tenebrio molitor* 1086
- metamorphosis, hormones, developmental stages, *Manduca sexta* 967
- metamorphosis, physiology effects on, *Insecta* 151
- nuclear polyhedrosis virus effects on, *Spodoptera litura* 275
- parasitoids, juvenile hormones effects on, *Apanteles congregatus*, *Manduca sexta* 8835
- photoperiods, body size effects on, *Heliconius melpomene* 1110.
- predatory behavior, visual stimuli, mechanical stimuli, *Rana linearis* 8295
- rhythms, cuticle growth synchronisation, *Blaberus fusces* 8899
- secretions, anal glands *Rhaphidostrepus virgatus* 6594
- starvation, larvae, juvenile hormones, *Manduca sexta* 3500.
- superimposed, diurnal effects on, *Manduca sexta* 1107
- temperature effects, *Ephestia cautella*, *Phlox interperetella* 1874
- temperature effects on, *Rhaphidus appendiculatus* 2181.
- timing, *Boophilus annulatus*, *Boophilus microplus*, parasites, cattle 1916.
- transformation, seminal fluid receptacles, ultrastructure, *Thermobia domestica* 1016.
- water balance, fat metabolism, body weight, *Nauphoeta cinerea* 7324.
- Moluccas**, new records, hosts, *Albizia falcataria*, *Pteroma plagiophleps*, defoliation 2092
- Momophis complexa**, new species, taxonomy, morphology, Egypt 7997.
- Mompha nodicolella**, distribution, abundance, habitat, British Isles 5882
- Monanus**, taxonomy, morphology, keys, India 7161.
- Monanus rambicus**, new species, taxonomy, morphology, India 7161.
- Monarda punctata**, damage, larvae feeding behavior effects on, *Hyles lineata* 543.
- Monarthropsalus baxi**, emergence, circadian rhythms, light effects on 6713.
- Monelata liscipennis**, new species, soil fauna, India, Sri Lanka 4883
- Monella caryella**, biological control, *Coccinella septempunctata* 694
- chemical control, trunk injection, trees, *Carya illinoensis* 8566.
- feeding damage, *Carya illinoensis* 9345
- feeding, effects on growth, damage, *Carya illinoensis* 4587.
- feeding effects on host plants growth, *Carya pecan* 2091.
- parasites, *Carya pecan* pests, USA, Texas 6155.
- Monellolipis nigropunctata**, biological control, *Coccinella septempunctata* 694.
- chemical control, trunk injection, trees, *Carya illinoensis* 8566.
- feeding damage, *Carya illinoensis* 9345
- feeding, effects on growth, damage, *Carya illinoensis* 4587.
- Mongolia**, new species, taxonomy, morphology, *Deuterophlebia sajaniae* 1629.
- Mongolia, People's Rep.**, new species, taxonomy, morphology, *Scenopinus gobiensis*, *Scenopinus kaszabi*, *Scenopinus maculatus* 7973
- surveys, entomofauna, *Rhopalocera*, *Herpetidae* 4736.
- surveys, species composition, *Mymricidae*, *Formicidae* 8678.
- surveys, species composition, *Staphilinidae* 3934.

Monitoring,

methodology, development, molting, morphogenesis, *Ostrinia nubilalis* 8211.
methodology, pests population dynamics, Aphididae 725.
pest control, Insecta, monitoring, *Phaseolus vulgaris* 709.
pests, methodology, mapping, *Psorophora columbiae* USA, Louisiana 5397
pheromone traps, capture efficiency, density, saturation, age, *Chironsteura* 1679

population dynamics, embryos, *Macrosiphum euphorbiae* 2873
population levels, attractants, *Cydia nigricana* 3022
population levels, pest control, chemical control, Insecta 3714
population levels, pest control, *Psila rosae* 3004
populations, pheromone traps, *Conopia myopaeformis*, Italy 2889

Monocamine,
adenylate cyclase, guanylnucleotides, nervous system, *Schistocerca gregaria* 6526

Monobia,

geographical distribution, USA, Texas, Mexico 2369

Monobia biangulata,

new records, geographical distribution, USA, Texas 2369

Monobia quadridens,

new records, geographical distribution, Mexico 2369

Monobia texana,

geographical distribution, USA, Texas, Mexico 2369

Monochamus,
xylophagous species, species composition, USSR, Siberia, Kamchatka Peninsula 768

Monochamus alternatus,

parasitism, effects on longevity, *Bursaphelenchus lignicolus* 7623

Monochamus alternatus,

adults, emergence, age effects, survival, fecundity 2905

attractants identification, aggregation behavior, pest control 1928

population dynamics, spatial distribution, seasonal variations, adults, forests 4428

Monochamus scutellatus,

mating, males 1895

Monocrotophos,

insecticides, pest control, toxicity, mortality, *Amsacta moorei* 1844

insecticides, toxicity, pesticide residues, *Pusa falguna*, pest control, *Ammaras* 2653

Monomers,

ribosomes, *Drosophila melanogaster* 9385

Monomorium,

defense mechanisms, agonistic behavior, *Apicotermitinae* 6219.

Monomorium minimum,

predators, feeding behavior, prey, *Rhinocyllus conicus*, USA, Virginia 1200.

Monosiphum phaeosoma,

intraspecific relationships, castes, aggression, reproductive behavior 3838.

mass rearing methodology 8864

Mononeura moniliforme,

gut microflora, *Myriapoda* 8306

Mononeura perapolydesmii,

gut microflora, *Myriapoda* 8306

Mononychellus caribbeus,

pests, host plants susceptibility, chemical control, *Manihot esculenta* 1428.

Mononychellus taajonia,

pest outbreaks, new records, Nigeria 3771.

pest outbreaks, pest control, Nigeria 1416.

Monophenol monooxygenase,

activity, insecticides effects on, *Protophormia terrae novae* 9029.

Monopis apollonia,

diets, food sources, Finland 7532.

Monopysyllus ciliatus protinus,

range extension, parasites, *Mammalia*, USA, Alaska 5530

Monosteira,

taxonomy, morphology, keys 1636.

Monosteira minuta,

new species, developmental stages, morphology 1636.

Monosteira remanei,

new species, developmental stages, morphology 1636

Monosteira tuberculata,

new species, developmental stages, morphology 1636.

Monoterpenes,

accumulation, infection, fungi transmission, *Scolytus ventralis*, *Abies grandis* 8473.

Monoterpenoids,

activity, alarm pheromone, alarm behavior, *Tyrophagus putrescentiae* 7339

Monrosia inpai,

new species, taxonomy, morphology, Brazil 6369.

Monrosia wilkita,

new species, taxonomy, morphology, Brazil 6358.

Montane environments,

biogeography, species composition, *Lepidoptera*, USA, Nevada, Spring Range 7914

Montedion M-9580,

insecticides, aerosols, evaluation, wind tunnels, *Anopheles quadrimaculatus*, *Psorophora columbiae* 6203

Montedion M-9751,

insecticides, aerosols, evaluation, wind tunnels, *Anopheles quadrimaculatus*, *Psorophora columbiae* 6203.

Montiel-Ausuliana,

new families, taxonomy 6417.

Montethostolus,

new genera, taxonomy, morphology 6417

Montethostolus genitalis,

new species, taxonomy, morphology, New Caledonia 6417

Moraceae,

host plants, ecological distribution, *Drosophila fima* 1628

Moraxella bovis,

survival, digestive tract, pathogens, *Musca autumnalis* 8136

Mordellistena amurensis,

new species, taxonomy, morphology 8749.

Mordellistena bicolor,

new species, taxonomy, morphology 8749.

Mordellistena kubani,

new species, taxonomy, morphology 8749

Mordellistenochoa,

new genera, taxonomy, keys 8749.

Mordellistenochoa strejecki,
new species, taxonomy, morphology 8749.

Mordellistena deserticola,

new species, taxonomy, morphology 6375.

Morella simplex,

cattle pests, abundance, British Isles, Scotland 736.

Moriniyus,

new genera, taxonomy, morphology 7145.

Mormoniella vitripennis,

embryogenesis, developmental stages, parasitoids 5068

isozymes, glycerol-3-phosphate dehydrogenase (NAD⁺), development,

distribution, tissues, characterization 6553.

Morocco,

new species, taxonomy, morphology, *Anthidium berbericum*, *Royanthidium*

bicoloripennis 7210.

new species, taxonomy, morphology, *Antiochella gignoni* 4814.

new species, taxonomy, morphology, *Prosimulium laami* 3993.

Morpho granadensis polybaptus,

life history, niche overlap, sympatric populations, *Morpho peleides limpida*,

Costa Rica 5141.

sympatric populations, habitat, *Morpho peleides limpida*, Costa Rica 6019.

Morpho peleides limpida,

interspecific relationships, sympatric populations, niche overlap, *Morpho*

granadensis polybaptus, Costa Rica 5141.

sympatric populations, habitat, *Morpho granadensis polybaptus*, Costa Rica 6019.

Morphogenesis,

cuticle, growth, larva, *Manduca sexta* 3518.

defective mutant, melanoma, *Drosophila melanogaster* 1527.

development, monitoring methodology, *Ostrinia nubilalis* 8211.

development, morphology, *Lithobius microps* 4253.

development, photoperiod effects on, *Euschistus tristigmus tristigmus* 7462.

developmental stages, growth rate, *Pectinophora scutiger* 3464.

diapause, temperature effects on, *Attagus megatoma* 5817.

digestive tract, embryogenesis, *Panorpa pyren* 3458.

genetic control, mutants, *Drosophila melanogaster* 9416

imaginal discs, mutation, patterns formation, *Drosophila* 762.

juvenile hormones analogues, terpenoid lactones, effects on, *Lipaphis erysimi*

6641.

juvenile hormones, bioassays, methodology, *Tribolium confusum* 4917.

larvae, isoenzymes, hemolymph, *Apis mellifera* 5827.

midgut epithelium, *Pedotomus unimaculatus* 3309.

ovary, blood meals effects on, *Stomoxys calcitrans* 3497.

pathogens, cytoplasmic polyhedrosis virus, *Heliothis armigera* 3397.

pathogens, infection, *Monura rileyi*, *Anticarsia gemmatilis* 4208.

reproductive organs, precocene II effects on, *Corycia cephalonia* 7425.

Morphology,

abdomen, termini, *Megaselia*, North America 2415.

aberrants, *Satyrus calanus falacer*, USA, New Jersey 7276.

abundance, *Auchenorrhyncha*, Turkey 4735.

Acleris obtusana obtusana, *Acleris obtusana fuscana*, Finland 7222.

adaptations, nesting behavior, *Palaecorticaria gratiosa* 1656.

adults, developmental stages, *Parasarcophaga reposita* 4927.

adults, developmental stages, *Simulium sanguineum* 3252.

adults, *Dysdera concinna* 6504.

adults, identification, *Icerya purchasi* 1722.

adults, identification, vectors, *Simulium squamosum* 869.

adults, larvae, *Smittia lasiops* 8031.

adults, larvae, *Synopsectra vinella* 4925.

adults, larvae, *Tabanidae* 1584.

adults, *Smunthrus floridanus*, USA, South Carolina 4943.

aegeae, *Apion assimile*, *Apion angusticollis*, Bulgaria 4710.

Aeshna wittei, Zaire 7236.

Allopcania fumosa, *Allopcania frisoni* 6457.

allotypes, analysis, identification, *Apis mellifera* 53.

Anomala octocostata 88.

antennae, taxonomy, *Orthocentrus bipunctellus* 6411.

antennae, *Trichoplusia* n. 3257.

antennal sensilla, *Hypochlora alba* 8072.

antennal sensilla, olfactory perception, age, *Apis mellifera* 915.

antennal sensilla, *Scolytus scolytus*, *Scolytus multistriatus* 7297.

antennal sensilla, systematic, *Bracidae* 2509.

Anthicidae, West Indies 1612.

Apiocera hispida 5238.

Apis mellifera, phenology, seeds, *Trifolium repens* 1970.

apodeme, age methodology, *Cochliomyia hominivorax* 8017.

appendages, pectines, dentition, *Tityus cambridgei*, *Rhopalus laticauda* 4942.

aquatic organisms, adults, juveniles, Insecta 1486.

Asiocartanemus, *Correitaranemus* 1581.

auditory perception neurons, *Gryllus bimaculatus* 4960.

biometrics, geographical variations, *Diplophila*, Australia 8044.

biometry, castes, immatures, *Nasutitermes aequilinus*, Brazil 8869.

brain, *Ceracris deflorata* 7289.

brain, phylogeny, *Symphyta* 7066.

bristles, selection, strains, *Drosophila melanogaster* 1553.

castes, colonial characteristics, *Paratrigona subnuda* 6996.

castes, overwintering colonies, *Vespa squamosa* 4644.

cells, wing discs, development, larvae, *Drosophila* 7429.

Ceutorhynchus pallidicornis 8893.

chromosomes, chromosome number, *Deltocephalus* 2325.

Clardus unicolor, *Pseudocladus leguati*, *Idiomycus nigrostriatus*, *Idiomycus*

simus, *Idiomycus notatus*, *Aethomyces viridis*, *Conchyloptera unicolor*,

Cyrtomyia perisema, *Cuneiceps insularis*, *Mascarenes* 4864

classification, host plants, *Podopinae* 3251

collections, keys, *Coleoptera*, Australia 4945.

coloration, aberrants, *Chlosyne lacinia*, USA, Texas 8042.

coloration, identification, eggs, *Rhodnius* 4099

coloration, keys, larvae, *Hydropsyche* 7266.

coloration, taxonomy, status, *Catocala* 7227.

comparison, larvae, 7 species, *Sisyridae* 1710.

comparison, *Leptoglossus cinctus*, *Leptoglossus fasciatus*, *Suas genitalis* 4938.

competitive behavior, adaptations, competition, males, *Podischnus agenor* 4423

conspecifics, *Brahmaea christophi*, *Brahmaea ledereri*, *Trichia* 5513.

copulation, *Coenagrion scitulum* 5645

Corotoca melantha, *Corotoca phylo*, Brazil 6377

costae, comparison, *Apoidea* 6511

Dacus opitiae, Australia 3626.

Morphology, (continued)

defence secretions, mechanical properties, *Goniotropis* 3381
development, compound eyes, *Periplaneta americana* 1296
development, esophageal bulb, *Rhagoletis pomonella* 8076
development, gynandromorphs, *Speyeria diana* 8654
development, larvae, *Athenegona socatra* 558
development, larvae, *Neuroptera* 8878
development, morphogenesis, *Lithobius microps* 4253
developmental stages, *Archilestes lucasensis* 4936
developmental stages, *Bunaea alcione* 7262
developmental stages, *Ceraclea nigritorquens*, Norway 5429
developmental stages, comparative studies, *Asilidae* 77
developmental stages, *Cydia pomonella* 3253
developmental stages, *Cydia pychora* 434
developmental stages, *Eurytemora crassipes* 4928
developmental stages, galls, *Torotrrips kostarabi* 4422
developmental stages, *Hydrocacia nordstroemi* 3255
developmental stages, keys, females, *Saissetia coffeae* 1705
developmental stages, larvae, *Aeneas virens* 4098
developmental stages, *Oxytropis lateralis* 4931
developmental stages, *Parornix faunella*, *Parornix torquillella* 8871
developmental stages, *Pennis anpa*, Venezuela 7777
developmental stages, *Prionomitus mutatus* 864
developmental stages, *Pterostichus panzeri* 6706
developmental stages, *Schizaphis graminum* 6485
diets effects on, nutrition, ionoleic acid, *Manestra configurata* 8079
difference, comparison, *Hyphaema cunea*, *Spilonema menastri*, *Spilosoma urticae* 49
digestive tract, feeding behavior, *Nicoletellidae* 496
digestive tract, physiology, *Periplaneta americana* 4992
Dillitenotus, Epitomus, Dillitenotus filiformis mundus, North America 4027
distribution, antennal sensilla, *Blattella germanica* 905
dwarfism, *Anthochoris cardamines* 8881
ecological distribution, community composition, *Acridoidea*, China, *People's Rep.* 4450
ecology, larvae, *Anopheles maculipennis*, France, Lyon 1571
eggs, *Bacillus aticus caprai* 4937
eggs, *Glossobranchius*, *Caryodon*, *Acanthoscelides*, *Zabrotes* 5641
eggs, *Hemerobius stigma* 5639
eggs, larvae, adults, *Kallitambinia australis* 866
eggs, larvae, *Brachythermus contaminata* 8280
eggs, larvae, *Euphranta connexa*, *Scambus brevicornis* 8040
eggs, larvae, *Nannobittacus elegans* 6490
eggs, larvae, pupae, *Carpinus detrita*, USA, Oregon 7523
eggs, nymphs, *Corneliana extensa* 8390
eggs, phylogeny, *Pteronarcyidae* 8036
eggs, *Sipylodea sipylus*, *Oxanus mackloti* 7267
eggs, *Skwala brevis*, Japan 3860
electrical properties, chemoreceptors, *Rhagoletis pomonella* 4136
embryogenesis, juvenile hormones, molting hormones, ooviviparity, *Nauphoeta cinerea* 3314
embryos, larvae, *Pedetonotus unimaculatus*, comparison, *Petrobius brevistylis*, *Machilis alternata* 336
Encarsia prosopalella, Trichoporus, Primaropalella, taxonomy 2450
Enicranidae, Iberan Peninsula 6445
exocrine glands, blood meals, *Rhipicephalus everti* everti 3378
exoskeleton, muscles, thorax, larvae, *Manduca sexta* 8084
exotic species, *Leptidoptera*, USA, New Mexico 5529
eye color mutants, *Plodia interpunctella*, *Ephesia cluella* 3905
feeding apparatus, parasites, *Arrenurus* 84
feeding behavior, habitat, larvae, streams, *Pycnosyche guttifer*, Canada, Quebec 6227
feeding behavior, host plants, *Clanoneurus americanus* 5904
feeding behavior, pollination, flowers, insects 2847
feeding, fecundity, *Clemensia albata*, *Proctococcus viridis* 7509
females, *Beata albopilosa*, Brazil 8736
females, *Belotus paranensis*, Brazil 6370
females, bristles, frenulum, *Leptidoptera* 1720
females, *Cryptocytus nigripennis*, Australia, South Australia 2673
females, *Elachista nielswolti*, Finland 4114
females, *Graphoderus mantiensis* 7278
females, *Lutzomyia temitophila* 6506
females, *Neoblatella puerilis*, Brazil 9499
females, nymphs, *Aphaniocera*, Australia, Tasmania 2476
females, *Rhyacophila spinata*, USA, California, Placer Co. 6461
females, *Tarphroderus mendax*, Brazil 6358
females, *Varrus jacobsoni* 4110
flight muscle mitochondria, age effects on, *Musca domestica* 322
follicles, temperature-sensitive mutant, *Drosophila melanogaster* 3099
galls, host plants, *Paradiptorix tumefacta*, *Abies balsamea* 6805
genitalia, *Aphaniocera*, *Oxycaenina* 9039
genitalia, *Carcinopygia lichenigera*, *Carcinopygia proserpina* 4045
genitalia, comparison, species identification, *Apotomis semifasciana*, *Apotomis infida* 82
genitalia, *Derovatellus* 4781
genitalia, differentiation, *Abrostola triplasia*, *Abrostola asclepiadis*, *Abrostola argemina*, Czechoslovakia 1723
genitalia, differentiation, *Celyphoides cespitanus*, *Celyphoides flavipalpus*, Czechoslovakia 1724
genitalia, *Eumenes pedunculatus*, *Eumenes coarctatus*, *Eumenes coronatus*, *Eumenes papillarius*, Finland, USSR 7893
genitalia, geographical variations, reproductive isolation, *Males*, *Drosophila teissieri*, Guinea, Rhodesia 1552
genitalia, juvenile hormones analogs, *Panstrongylus megistus* 5089
genitalia, males, females, *Enicospilus americanus*, *Enicospilus flavoscutellatus* 8888
genitalia, males, females, *Hypsiptila robusta* 90
genitalia, males, females, *Parandra* 2666
genitalia, males, *Harpagophylla* 5061
genitalia, males, *Holcostethus hirtus* 4941
genitalia, males, *Holcostethus hirtus*, 5809
genitalia, males, *Nemobrendus aeneipennis*, *Nemobrendus melzeri* 8755
genitalia, males, nymphs, *Proctodius punctatus* 6480
genitalia, males, *Plusia mandarina*, Sweden, Uppland 4714
genitalia, males, *Saidula latitollis* 6414

Morphology, (continued)

genitalia, males, nymphs, *Derovatellus moquensis* 8043
genitalia, mating effects on, *Cochliomyia hominivorax* 8212
genitalia, *Metacalla prunosa*, Palearctic Region 4715
genitalia, sex differentiation, *Hyperodes bonariensis* 87
genitalia, *Stenochilus*, *Colopha*, Australian Region 8052
genitalia, taxonomy, new species, *Cyrtopogon sabroskyi*, USA, Wyoming 2421
genitalia, taxonomy, *Platyspergys* 6500
genitalia, *Tetralimnidae* 476
geographical distribution, *Arthropodae*, *rusticus*, British Isles 6304
geographical distribution, biogeography, new species, *Labidostomatidae* *vialeae*, *Labidostomatidae* *coriscum*, Corsica 4454
geographical distribution, breeding, *Andricus quercuscalicis*, British Isles 7616
geographical distribution, geographical variations, *Charadra ingens* 2510
geographical distribution, *Hannaba* 1601
geographical distribution, introduced species, *Poecilocoryptus formicophilus*, USA 6333
geographical distribution, keys, *Ectobius sylvestris*, USA, New York 2472
geographical distribution, keys, *Nyctenoboscinae*, Philippines 871
geographical distribution, *Micrognathus*, *indus*, India 7111
geographical distribution, new records, *Botocudo fraternus*, *Botocudo signanda*, India 7911
geographical distribution, new records, *Japva solifugus*, India Poona 5521
geographical distribution, new records, *Rhopalus tigrinus*, North America 6332
geographical distribution, new records, *Tanytarsus coffmani*, USA, North Carolina 7111
geographical distribution, phylogeny, *Oxythya*, Mediterranean Region 1704
geographical distribution, *Triphillum hispidum*, Brazil 4109
geographical variations, systematic, parapatric populations, *Lycena xanthoides*, USA, California 7123
geographical variations, *Systenocentrus japonicus*, *Systenocentrus uyenurui*, Japan 6486
geographical variations, variability, *Pemphigus populicaulis* 71
gills, larvae, *Euphranta* 6538
gnathoma, *Pseustes* 6497
gonads, sex determination, mutants, *Drosophila melanogaster* 6268
Goniatus apiculatus, Australia 833
growth development, nymphs, *Dakelorus dissimilis* 7432
gynandromorphism, *Ectatoma laetum* 705
gynandromorphism, genetic factors, *Dermacenter andersoni* 1547
gynandromorphs, *Diphysa febrilis* 5648
head capsules, growth, food plants, *Spodoptera litura* 7468
head, evolution, *Rhynchota*, *Psocoptera*, *Thysanoptera* 3134
head, mouthparts, *Copris sacculata* 6894
head, grossum, *Botocudo cinctus* 4849
head, teratology, *Tingidae*, Czechoslovakia 3256
Helochares lividus, *Helochares punctatus*, *Helochares obscurus*, Europe 7170
Heteromurus tetrastichus, *Heteromurus tenuicornis*, Micronesia 3988
histology, ear, *Hemiteles crassidens* 156
histology, malpighian tubules, *Myiarchus pusillata* 929
histology, mouthparts, *Oestronyia leporina* 83
historical account, biogeography, *Hypotonia oasii*, Spain 3142
hosts, parasites effects on, *Mermithoidea*, *Einfeldia dissidens* 7393
host plants, pollinators effects on, *Hyles lineata*, *Aquilaia caerulea* 2834
hybridization, *Chrysocarex*, *Chrysobothris* 7051
hybrids, sympatric populations, *Anobolia furcata*, *Anobolia nervosa*, Europe 7052
identification, *Abaltesmyia jana*, USA, Texas, Village Creek 4107
identification keys, *Anopheles*, Thailand 6479
identification keys, *Apobdinae*, Africa 2304
identification keys, *Diptera*, British Isles 3258
identification keys, *Haemaphysalis cooley*, South Africa 3259
identification keys, *Medetera ruficornis*, *Hercostomus quadifidus* 6499
identification keys, nymphs, *Cikadelella*, Europe 4935
identification keys, *Nobesia*, New Zealand 6503
identification keys, *Oedalus* 1670
identification keys, *Pephyssa* 4857
identification keys, *Rhyacophidae*, Canada 6462
identification keys, 8 species, *Parades*, Oriental Region 6410
identification, sex differences, *Ips typographus* 7274
identification, *Spermophagus sericeus*, *Spermophagus calyptegus* 8884
immature stages, *Bruchomorpha oculata*, laboratories, rearing 1717
immature stages, *Citheronia laocoon*, Brazil, São Paulo 6492
immature stages, *Culicoides homotomus*, China, *People's Rep.*, Szechuan Province 2502
immature stages, *Dioryctra taeda*, *Dioryctra taeda* 2503
immature stages, *Dysdermonia boreas*, Brazil 6484
immature stages, *Erythrina polyzona polyzona* 8174
immature stages, life history, parasites, *Megastelus davisii* 1987
immature stages, *Parasarcophaga crassipalpis*, *Parasarcophaga omega*, *Tricholopocrypta beta*, *Tricholopocrypta impatiens*, *Tricholopocrypta tryoni*, *Tayloromyia nota*, *Boettcherisca peregrina*, Australia 2504
immature stages, *Ricinodes westermanni*, Ivory Coast 7156
immature stages, *Schelus cinctus*, cinctus, USA, Illinois 8292
immature stages, *Schobera trancana* 6491
immature stages, *Trichogramma brevicaupum* 7422
inheritance, population genetics, *Cyclophora albipunctata subrosea*, British Isles 4690
instars, adults, *Aradus foliaceus*, *Aradus mirabilis* 8032
instars, *Apache* *dergisi* 3254
instars, *Campoplegineae*, *Cryptineae*, *Pimplinae* 8034
instars, development, *Marcus testulatus* 74
instars, developmental stages, *Simulium chinensis* 8880
instars, *Mesaphorura sylvatica*, *Mesaphorura yoshi* 6486
instars, nymphs, *Orthocentrus toledoi* 4933
instars, pests, *Phragmocossia albida* 4100
instars, taxonomy, keys, *Helulla rogatilis*, *Helulla* 1657
instars, taxonomy, keys, *Quercus*, *Negomacrus* 1713
intraspecific variation, *Stylops bipunctatus* 1725
invertebrates, larvae, *Aeshna bonariensis*, Uruguay, Parque R. 865
Iridomyia humilis, Switzerland 7091
juvenile hormone, corpora allata, larvae, pupae, *Dicranis obliqua* 7475
juveniles, *Euplexia kiorha* 8875
keys, *Acetentria*, British Isles 4946
keys, *Acanthodoryctes* 8057
keys, *Anthaxia pisacensis* 8748
keys, *Asilidae*, India 4001

Morphology, (continued)

- keys, Blattellidae 7273.
 keys, Ceratids 5649
 keys, Culicidae, Cuba 8887
 keys, developmental stages, *Protoplavinana pyramiformis* 4097
 keys, distribution, *Kaltenbachella* 7197
 keys, Ectoninae, Mexico 6325
 keys, *Enicospilus antefurcalis*, Africa 3219
 keys, *Ennominae*, Canada 5654
 keys, geographical distribution, *Listrophoridae* 2384
 keys, geographical distribution, *Shartophora* 1653
 keys, *Heteroceridae*, Sweden 7090
 keys, *Holotrochus* 7958
 keys, *Hyalomyzus*, North America 5589
 keys, larvae, *Myrmecoleon*, USA, Florida 1709
 keys, larvae, *Stator* 4932
 keys, *Leiodes*, Sweden 7093
 keys, new species, *Caledonica* 810
 keys, new species, *Mordellistenochroa* 8749
 keys, *Philotarsidae* 4909
 keys, *Pipunculius campestris*, Czechoslovakia 2418
 keys, *Pristiphora compressa*, *Pristiphora pallida*, *Pristiphora wesmali*, British Isles 5646
 keys, *Pteropora*, Africa 1668
 keys, species, *Senopinus*, *Metatrichia*, *Stenomipterale*, Israel 5650
 keys, synonymy, USA 5651
 keys, taxonomic revision, *Stenodynerus* 8832
 keys, taxonomy, *Diplolepra*, *Diplolepra duplicata*, *Diplolepra murgani* 1674
 keys, taxonomy, *Lasius*, Asia, *Himalayan* Mt. 5590
 keys, taxonomy, *Pompilinae*, Argentina 1655
 keys, taxonomy, *Simulium amazonicum*, Brazil 3196
 larvae, *Apocera bispidula*, USA, California 9087
 larvae, *Baetis dardanus*, Canada, Alberta 2497
 larvae, castes, *Macrotermes michaelseni* 1708
 larvae, *Corticus glaber* 6724
 larvae, *Duxella nova* 8035
 larvae, *Duxella caranti* 7111
 larvae, *Ecdyonurus macani*, Czechoslovakia 777
 larvae, females, *Ptenopygus flavata* 5633
 larvae, *Helocombus bifidus* 4930
 larvae, identification, *Ephemeroptera*, North America 2498
 larvae, keys, *Agabus* 8041
 larvae, keys, *Chrysomelidae*, British Isles 5636
 larvae, keys, *Epicauta* 5638
 larvae, keys, *Nicrophorus*, *Ptomaspocus* mono 5637
 larvae, *Leucopholis burmeisteri*, *Leucopholis lepidophora* 4934
 larvae, life cycle, *Synclitina linealis* 7265
 larvae, life history, *Agabus elongatus*, *Agabus wasastjernae* 4929
 larvae, life history, *Holochroa dissociata dissociata* 7263
 larvae, life history, host plants, *Aeliotopus tantalus* 7515
 larvae, *Liponeura bezzii* 1712
 larvae, *Nectopsyche taylori*, USA, Florida 6481
 larvae, *Neuroptera* 8876
 larvae, *Pagastia* 8038
 larvae, *Phalaenophana extremalis* 7264
 larvae, *Philara atrocyanea* 6482
 larvae, *Protoplasma* var., *Protoplasma didymus* 1715
 larvae, pupae, *Dolophobus major*, geographical distribution, USA, Southeast 1716
 larvae, pupae, *Hypomecis umbrosaria* 5644
 larvae, pupae, *Midamus hecate* 8873
 larvae, pupae, *Onchodes gutturalis* 6487
 larvae, pupae, taxonomy, new species, *Simulium patzianense*, Guatemala 1631
 larvae, pupae, *Tipula ultima* 6493
 larvae, *Rhinismus viridianeus*, Canada, British Columbia, Vancouver I. 2769
 larvae, *Sagra femoralis* 6483
 larvae, sexual dimorphism, *Pseudosoma paucinae* 867
 larvae, *Sinophorus alcae*, *Charops aditya*, *Charops hersei* 7261
 larvae, *Symptetrus madidum*, Canada, British Columbia, Riske Creek 6495
 larvae, *Tarsonemus sukianus* 79
 larvae, taxonomy, status, *Catocala pretiosa* 7231
 larvae, terminology, *Trombiculidae* 4101
 larval, life history, *Lybius angustior*, Sweden 3986
 lateral neurosecretory cells, peritrichal glands, *Argas arboreus* 8069
 leaves, habitat selection, community composition, *Collemboles* 9207
 leaves, host plants, effects on feeding behavior, *Adalia bipunctata* 5959
 lecceotypes, *Anastrepha parallela* 8886
 leg, locomotion, *Carabidae* 8063
 leg sensilla, mechanoreceptors, *Periplaneta americana* 4980
 leg, sex linkage mutants, genetic analysis, *Aedes togoi* 7852
 life cycle, cocoons parasites, *Dipron pini* 7541
 life cycle, hematophagy, *Stomoxys calcitrans*, *Tabanidae* 3743
 life cycle, *Necrodes*, *Nicrophorus*, British Isles 5909
 life history, geographical distribution, *Pseudopholus panoptes* 5138
 life history, geographical distribution, *Selidosoma plumaria*, *Selidosoma brunnea*, Czechoslovakia 7104
 life history, host plants, *Hemileuca grotei* 7508
 life history, parasites, *Tetractinopora victoris*, *Ceragriion cormandelianum* 2630
 literature reviews, larvae, *Lucanidae* 2501
 males, *Echinothoridion* 1718
 males, genitalia, *Blattella* 804
 males, *Paktonius distinctus*, Thailand 5550
 males, polymorphism, developmental stages, *Polystomophora ostiipurima* 2500
 males, *Rhinossus braziliensis*, Brazil 6502
 males, taxonomy, *Acleridae* 6424
 malformations, juvenile hormones effects on, population studies, *Eurygaster integriceps* 6648
 malformations, *Listropsylla chelura chelura* 1721
Matuccoccus joseph 8870
 maxillary palps, movements, *Gryllus bimaculatus* 8055
 mouthparts, genitalia, *Hesperandrus* 6505
 mouthparts, geographical variations, altitude, *Orinocarabus latreillanus*, Italy, Novara 7073
 mouthparts, *Osmia scutellini*, USA, Utah 5880
 muscles, locomotion, *Periplaneta americana* 4958

Morphology, (continued)

- mutants, genetic analysis, linkage, *Aedes togoi* 7851
 mutants, mosaics, *Drosophila melanogaster* 1535
Neoneura waltheri, Argentina 3260
 nervous system, giant axons, *Periplaneta* 897
 nests, nesting behavior, *Agapostemon* 7006
 neurons
 neurons, antennae, mutants, *Drosophila* 142
 neurons, auditory perception, *Gryllus bimaculatus* 129
 neurons, defective mutant, leg, *Drosophila* 896
 neurons, thorax ganglia, *Locusta migratoria* 8065
 neurophysiology, neurosecretion, neurons, literature reviews, *Insecta* 900
 new genera, *Hylaeus*, *Laccodylaeus*, Australia 4749
 new genera, new species, *Caladomyia*, South America, Amazon R. 4838
 new genera, new species, *Diptilorynchus*, *Diptilorynchus sinuatus*, *Rhynchophytus shoreicola*, India, West Bengal 8714
 new genera, new species, *Flavicornuculum*, China, People's Rep. 3996
 new genera, new species, *Leptotrochidae*, South America 5575
 new genera, new species, *Ovinocampa fulciper*, Spain, Santander, Tresviso 4824
 new genera, new species, taxonomy, *Agckianella koponeni*, USSR, Abkhazia 6429
 new genera, new species, taxonomy, *Arctidia*, India 4859
 new genera, new species, taxonomy, *Cardinophoridae*, Ecuador 5563
 new genera, new species, taxonomy, *Hadzhibeylia physococci*, USSR, Georgia 6440
 new genera, new species, taxonomy, *Misotropia mendocinctus*, Brazil 6354
 new genera, new species, taxonomy, *Oetostigma herbivora*, Tonga 6388
 new genera, new species, taxonomy, *Orobittacus obscurus*, USA, California 6450
 new genera, new species, *Tingidae*, Africa 4856
 new genera, new species, *Woldana*, *Woldana campana*, Panama 2439
 new genera, taxonomic revision, *Allocleremys* 4886
 new genera, taxonomy, *Archetraulodes*, *Demoulinellus*, *Rhigotopus*, *Secochela*, South America 7976
 new genera, taxonomy, *Cnethocymata*, Australia 4748
 new genera, taxonomy, *Dryocyba*, *Zonocyba*, Europe 4935
 new genera, taxonomy, *Johnbelkinia* 6400
 new genera, taxonomy, *Minymischa* 6441
 new genera, taxonomy, *Neoxanopsalbia judithae*, Sri Lanka 7132
 new genera, taxonomy, *Neocampocarpus* 4111
 new genera, taxonomy, *Neophantacus malloius*, India 7141
 new genera, taxonomy, *Spilotrigoidea*, Africa 7938
 new genera, taxonomy, *Xestiodon*, Neotropical Region 4776
 new genera, taxonomy, *Xylotopus*, Nearctic Region 3994
 new records, geographical distribution, *Adactylus*, India 7275
 new records, geographical distribution, *Gloma fuscipennis*, Belgium 7892
 new records, islands, *Sphexodes cristatus*, Baltic Sea 3942
 new records, *Rhinoceros bruchodes* 790
 new species, *Acmopolymna sema*, *Acmopolymna miamei*, *Acmopolymna uma*, *Acmopolymna immaculata*, North America 2457
 new species, *Aesalis imaniishi*, Taiwan 8776
 new species, *Amphimema albifasciata*, *Amphimema lebezi*, Nepal 3231
 new species, *Anthaxia ariadus*, *Anthaxia brodskyi*, Crete 8760
 new species, *Aradidae*, China, People's Rep. 4008
 new species, *Aradidae*, Mexico 31
 new species, *Archilestes latialatus*, Central America 1666
 new species, association, crop fields, *Tetranychidae*, India 8716
 new species, *Atractomorpha*, China, People's Rep. 2475
 new species, *Austrocerella columbae*, Australia, Tasmania 2476
 new species, *Axonopsis guadarramensis*, Spain 13
 new species, *Bactriola munuscula*, *Hebestola brasiliensis*, *Pseudogistostola reichardt*, Brazil 6363
 new species, *Basilobella parvata*, Japan 8
 new species, bionomics, *Pytophorus pinsapo*, Spain 8763
 new species, *Borharia shirleyanae*, USA, Texas 3171
 new species, *Onchodes alterniflorae*, North America 3204
 new species, *Calyptera*, China, People's Rep. 3197
 new species, *Carabidrus andreas*, Australia, Victoria 2405
 new species, *Carpinellus graciliformis* 14
 new species, castes, *Leptimelitta guyanensis*, *Trigona savannensis*, French Guiana 3220
 new species, *Catanotopinae*, China, People's Rep. 847
 new species, *Cephalota hayati*, India 2462
 new species, *Ceratopogonidae*, China, People's Rep. 1575
 new species, *Ceratopogonidae*, South Africa, Transvaal 8796
 new species, *Certonotus*, South America 1646
 new species, *Chalcidoidea*, *Mascarene* Is., Reunion I. 4877
 new species, *Chorinaeus rhenanus* 1648
 new species, *Coenosia subflavicornis*, China, People's Rep. 2411
 new species, *Coenosia subflavicornis*, China, People's Rep. 2411
 new species, *Coleoptera*, West Indies 806
 new species, *Coxia iberica* 1635
 new species, *Coryphorus aquilus*, South America, Amazon R. 3206
 new species, *Cryptotopus zavelli* 2424
 new species, *Cryptotrypes minchami*, Australia, South Australia 2673
 new species, *Culex tapingensis*, China, People's Rep., Tianpingshan 2423
 new species, *Culicoides*, Colombia 812
 new species, *Culicoides schramae*, *Culicoides krombeini*, Sri Lanka 2413
 new species, *Deltocephalinae*, South America 5587
 new species, *Desisteneria morylii*, Borneo 23
 new species, *Depressaria narteyi*, *Pseudometelia elsa*, *Mompha complexa*, Europe 7997
 new species, *Dichrorampha sapodilla*, *Dichrorampha manilkara*, USA, Florida 1660
 new species, *Dicranocentrus*, Ivory Coast 3190
 new species, *Dicrodiplosis manihoti*, Africa 1624
 new species, *Dixa pseudindiana*, USA, Minnesota 2416
 new species, *Dixella nixiae*, Honduras 29
 new species, *Drosophila moana*, Australia, Torres Strait 3953
 new species, *Drosophila noricus*, Austria, Carinthia Mt. 3235
 10 new species, *Epiranura*, India, 8816
 new species, *Euthystira xinyuanensis*, China, People's Rep., *Euthystira xinyuanensis*, new species, taxonomy, morphology, China, People's Rep. 2474
 new species, *Frontopsylla wolensini*, China, People's Rep. 44
 new species, genitalia, *Psallus physocarpus*, USA, New York 2435
 new species, geographical distribution, *Caenis candida*, Canada 1577
 new species, geographical distribution, ecological distribution, *Dacus opilae*, Australia 821
 new species, geographical distribution, *Staphylinidae*, New Guinea 2398
 new species, *Goniozus collessi*, *Goniozus mandibulatus*, *Goniozus jacintae*.

Morphology, (continued)

- Australia 833.
 new species, *Gypona metalana*, *Gypona rubranura*, *Gypona decorana*, *Gypona quadra*, *Gypona mocamba*, *Gypona platina*, *Gypona colomenella* 2444.
 new species, *Himalotrechodes insignis*, Nepal 17.
 new species, *Himeunka bana*, *Himeunka chibana* 4018.
 new species, *Histendae* 8769.
 new species, house dust, *Dermatophagoides siboney*, Cuba 3970.
 new species, *Hypogagrapta punctata*, USA, Pennsylvania 3136.
 new species, *Hypogeoecoccus pungens*, Argentina 1639.
 new species, *Ischnophyllus shanhsiensis*, China, People's Rep. 43.
 new species, *Irodes* 3974.
 new species, *Ixodes matopi*, Zimbabwe 12.
 new species, keys, males, *Alienates* 2433.
 new species, larvae, *Kermes iselini*, *Kermes primus* 1638.
 new species, *Leucospis mackerrasi*, Australia 2458.
 new species, *Lygaosoma*, China, People's Rep. 824.
 new species, *Margardesia destmieri*, Ivory Coast 1791.
 new species, *Megaselia carola*, *Megaselia lanata*, *Megaselia rotunda*, *Megaselia unguilata*, North America 2415.
 new species, *Mesophorus hylophila*, *Mesophorus jarmulae*, *Mesophorus jiru* 8778.
 new species, *Mezira smithi*, *Ardis denticulatus*, USA, Georgia, Philippines 8810.
 new species, *Microdytes*, Nepal 18.
 new species, *Mitopus ericaeus*, British Isles 8740.
 new species, *Murphyella aliquidula*, *Timahocoris paululus*, Singapore 8802.
 new species, *Nanorchestidae*, Antarctica, Victoria Land 8722.
 new species, *Neobius apuanicus*, Italy 1594.
 new species, *Neolindus*, Peru, Brazil 1616.
 new species, *Neomaculata spraea*, USA, Florida 2464.
 new species, *Neotychius silverybergi*, *Corimbia betpakdagensis*, *Apion tomienae*, USSR 5557.
 new species, new genera, *Annekecoris brunneus*, South Africa 8801.
 new species, new genera, *Austroamphanthus woodwardi*, *Woodwardohignus gracilis*, Australia 825.
 new species, new genera, *Callimetopides albomaculatus*, *Sybra mozzoti*, Sri Lanka, New Guinea 3182.
 new species, new genera, *Cryptarthria pseudovalis* 41.
 new species, new genera, *Donicotopis bicandans*, Canada, Northwest Territories 4826.
 new species, new genera, *Epichermes aztecus*, Mexico 8743.
 new species, new genera, *Hughecia giuliani*, Australia 4779.
 new species, new genera, *Leptopina papillata* 1598.
 new species, new genera, *Omicrin* 4786.
 new species, new genera, *Sarcophagidae*, China, People's Rep. 24.
 new species, new genera, taxonomy, *Anantherpes thimoteocastae*, Brazil 8741.
 new species, new genera, taxonomy, *Atlantimeris guarinii*, *Atlantimeris jahirigaura*, Brazil 8836.
 new species, new genera, taxonomy, *Ceratoletes proboscis*, Brazil 8739.
 new species, new genera, taxonomy, *Chalcotrechima procerus*, Japan, Shikoku I. 4818.
 new species, new genera, taxonomy, *Drosophilidae*, Australia 8705.
 new species, new genera, taxonomy, *Guaubesia clareae*, Brazil, Sao Paulo 6353.
 new species, new genera, taxonomy, *Oscoutomeces besucheti*, *Emmelostiba besucheti*, Lebanon 7164.
 new species, new genera, *Tomnoiriella mirabilis*, *Caenobrunetia echinoflagellata*, Brazil 1630.
 new species, new genera, *Umboiella antennata*, *Peritropella malgache*, New Guinea, Umboi I., Madagascar 4852.
 new species, new records, *Sciandrea*, USSR 6396.
 new species, new records, *Trichogramma*, Hawaii 8820.
 new species, new subspecies, *Geotrupes marteni*, *Geotrupes stellous*, *Geotrupes stellous annapurnicus*, Nepal 807.
 new species, *Nieta afghanica*, *Anisochrysa nuristanica*, *Brinckochrysa naumanni*, Afghanistan 4066.
 new species, *Nupedia plicatula*, China, People's Rep. 813.
 new species, *Nymphes*, *Myiodactylus*, Australia 3227.
 new species, *Ophiomyia pueravivora*, *Amatruomyia belamcandae*, *Phytomyza hasegawai*, Japan 2419.
 new species, *Oreothalia spinitarsis*, *Oreothalia sierrensis*, *Oreothalia chilicotti*, *Nearctic Region* 2426.
 new species, *Orobolentus tianshanicus*, USSR 16.
 new species, *Ozophora parvipapa*, South America 2370.
 new species, *Paraleucopis mexicana*, Mexico, California Gulf 2425.
 new species, *Parachoengetia magnatarata*, Venezuela 8727.
 new species, *Parasites*, *Aphelinus prociophilus*, *Prociophilus fraxinifolii*, USA, Iowa 39.
 new species, *Parasites*, *Cephalota hayati*, India 4872.
 new species, *Parasites*, *Eurytoma* 4878.
 new species, *Parasites*, *Mitonyssus*, *Chiroptera*, South America 10.
 new species, *Parasites*, *Stemmatosteres primus*, *Antonina graminis*, South Africa 2029.
 new species, *Parasites*, *Tegolophus spondillius*, *Tegolophus vitexis*, India, West Bengal 1969.
 new species, *Parasites*, *Trombiculidae*, *Rousetus amplexicaudatus*, *Rallus torquatus*, Philippines 794.
 new species, *Parasites*, *Tropilaelaps koenigera*, *Apis dorsata*, Sri Lanka 3973.
 new species, *Parasites*, *Tytodectes*, Australia 1589.
 new species, *Parasitoids*, *Aphididae*, India 7213.
 new species, *Pentatomia kunningensis*, China, People's Rep. 2436.
 new species, *Pherbellia hachmanni*, *Pherbellia stylifera*, *Pherbellia lutheri* 5572.
 new species, *Phytomyza josephi*, *Sycoscapter rosae*, USA, Florida 8830.
 new species, *Phlebotomus rousetti*, South Africa 1627.
 new species, *Pison areniferum*, *Pison ciliatum*, *Pison barbatum*, Australia 2448.
 new species, *Polycentropus pirisui*, Italy 3234.
 new species, *Psychodidae*, USSR, Azerbaijan, Iran 3199.
 new species, *Phlebotomidae*, Asia 35.
 new species, *Rhous barthelemy*, *Rhous gagespaulus*, *Hyperbatus marmoratus* 1650.
 new species, *Sasatromaculata umbonensis*, Papua New Guinea 8728.
 new species, *Scopaeus fageli*, *Scopaeus giardi*, Ivory Coast 1603.
 new species, *Sergentomyia turtanensis*, China, People's Rep., Szechuan Province 2422.
 new species, *Serromyia heveli*, *Serromyia maculipennis*, *Serromyia punctata*, Sri Lanka 7904.
 new species, *Setenis*, *Formosa* 1610.
 new species, *Spermophagus caricus*, Turkey 8777.
 new species, *Spinturnix ibetensis*, China, People's Rep. 2386.

Morphology, (continued)

- new species, *Stenomema bednariki*, USA, Kentucky 2432.
 new species, *Strongylophthalmyia sackelbergi*, USSR 27.
 new species, *Stylopauporus uzbekistanicus*, *Stylopauporus golovatchi*, *Eurypauporus tetrastichus*, USSR 4070.
 new species, *Tamborinea commoni*, Australia 2412.
 47 new species, taxonomy, *Malachidae*, Asia, Himalayan Mts. 7944.
 8 new species, taxonomy, *Pseudotegana* 8787.
 new species, taxonomy, *Acanthophilus capscin*, Turkey 5545.
 new species, taxonomy, *Acanthoscelides devriesi*, *Acanthoscelides pignicola*, *Acanthoscelides zebratus* 7162.
 new species, taxonomy, *Acnemia* 8794.
 new species, taxonomy, *Adamystus conneux*, Pakistan 7150.
 new species, taxonomy, *Aedes kesseli*, Tonga 6406.
 new species, taxonomy, *Aeschna mooni*, Zambia 7236.
 new species, taxonomy, *Afronurus subulvius*, *Ephemerythus dissimilimus*, *Caenomedes magniploia*, *Caenomedes inflexa*, Zaire 6413.
 new species, taxonomy, *Afrophiloscia aelleni*, Kenya, Tanzania 7246.
 new species, taxonomy, *Afrotrombicula gabonica*, *Afrotrombicula vaubreei*, *Trombiculidae*, Gabon 798.
 new species, taxonomy, *Agabus apache*, USA, Arizona 4799.
 new species, taxonomy, *Agelocera sokolovi*, Vietnam 6383.
 new species, taxonomy, *Alaibetus hantensis*, Haiti 8799.
 new species, taxonomy, *Albanoglossus martensi*, *Diplopoda*, Iran 851.
 new species, taxonomy, *Aleceris*, Brazil 3214.
 new species, taxonomy, *Allopauporus feilbergi*, *Allopauporus seychellicus*, *Allopauporus naheicus*, *Allopauporus extenuatus*, *Allopauporus quadridentatus*, *Allopauporus aculeiglossus*, *Cauevtauropus proprius*, *Cauevtauropus clavistylus*, *Seychelles* 7245.
 new species, taxonomy, *Alluaudomyia fuscicornis*, *Stolobezzia ensistyla*, India 4000.
 new species, taxonomy, *Alluaudomyia variegata*, USA, Southeast 7968.
 new species, taxonomy, *Allobacina*, China, People's Rep. 6322.
 new species, taxonomy, *Allobacina*, India 7160.
 new species, taxonomy, *Amblyseius alpicola*, *Amblyseius liturivorus*, Japan, Honshu 7135.
 new species, taxonomy, *Amblyseius chargini*, Asia 8725.
 new species, taxonomy, *Amorphia silvestris*, USA, West 6442.
 new species, taxonomy, *Anagrus abdul rasouli*, Iraq 6434.
 new species, taxonomy, *Anapleus gelinus*, *Anapleus newallii* 8753.
 11 new species, taxonomy, *Anastrepha*, Brazil 8788.
 new species, taxonomy, *Anastrepha richardi*, Venezuela, *Anastrepha tecta*, Peru 8790.
 new species, taxonomy, *Androlaelaps capromydis*, *Ornithonyssus garrodoi*, Cuba 8720.
 new species, taxonomy, *Aniarella ferracii*, *Phylloptera verruculosa*, *Paracora maculifemora*, Italy 6455.
 new species, taxonomy, *Anisops ayei*, Australia, Northern Territory 5580.
 new species, taxonomy, *Anomalobaccharis littoralis*, USA, *Halcacaroidea angustus*, *Halcacaroidea breviculatus*, *Chile*, *Strates* of *Magellan* 7147.
 new species, taxonomy, *Anthrudium berbericum*, *Royanthidium bicoloripennis*, Morocco 7210.
 new species, taxonomy, *Anthobocptes glycosmis*, *Cosella ichnecarpasia*, *Epeicodiplopyis clerochordis*, India 7138.
 new species, taxonomy, *Antidribea*, Africa, Madagascar, Philippines, Brazil 7942.
 new species, taxonomy, *Antonella gignoi*, *Laemostenus peloponnesiacus*, *Laemostenus thesalicus*, *Trogloaenium novaeiberniae* 4814.
 new species, taxonomy, *Asuparna himalayensis*, India 7208.
 new species, taxonomy, *Aphanosoma hungaricum*, Hungary 7967.
 new species, taxonomy, *Aponychus tashanicus*, China, People's Rep. 3972.
 new species, taxonomy, *Aradidae*, Central America 7978.
 new species, taxonomy, *Arborichthys styosetosus*, Canada, Ontario 5546.
 new species, taxonomy, *Argyresthia sorbella*, *Epinotha brunichiana*, *Crambus encellus*, *Thera albomarginata*, Hungary 7995.
 new species, taxonomy, *Ardeus sinensis*, China, People's Rep. 4023.
 new species, taxonomy, *Artemonum hobertlandi*, Zaire 4011.
 new species, taxonomy, *Ascoschoengastia danelia*, USSR, Russia 7146.
 new species, taxonomy, *Asilidae*, India 7184.
 new species, taxonomy, *Asolus lodosi*, *Telenomus turicicus*, Turkey 7989.
 new species, taxonomy, *asterolecanii*-group, 26 species, *Metaphysus*, South Africa 4874.
 new species, taxonomy, *Atherigona*, Africa 5567.
 new species, taxonomy, *Athetia chrismeri*, Sweden 4777.
 new species, taxonomy, *Atholus khnzoriani*, USSR, Armenia 8766.
 new species, taxonomy, *Automeris louisiana*, USA, Louisiana 7228.
 new species, taxonomy, *Baeocercidium*, Sulawesi 5555.
 new species, taxonomy, *Baetis chantaensis*, USSR, Kazakhstan 7190.
 new species, taxonomy, *Bakerdiana bekeczewskii*, *Petalotium ruckae*, *Imparipes comatosimilis*, *Imparipes paracolosimilis*, *Scuticarus myrmecophilus*, *Scuticarus ovoidesimilis*, Poland 4761.
 new species, taxonomy, *Bakerus amazonicus*, *Bakerius maculatus*, South America, Amazon R. Basin 4862.
 new species, taxonomy, *Balcitula walcidi*, Panama 6422.
 new species, taxonomy, *Barchaeta caudata*, USSR, Caucasus Mts. 6397.
 new species, taxonomy, *Barus hartmanni*, Panama 7950.
 new species, taxonomy, *Baryconus dudichi*, Philippines, *Baryconus gallego*, Costa Rica 7986.
 new species, taxonomy, *Beetellus taxodii* 7955.
 new species, taxonomy, *Belotus acutipennis*, *Belotus maculatus platoniensis*, Brazil 6370.
 new species, taxonomy, *Bembix inyoensis*, USA, California 6431.
 new species, taxonomy, *Bembix elisabethae*, Sumatra 4042.
 new species, taxonomy, *biogeography* 4048.
 7 new species, taxonomy, *Brachyantha* 7189.
 new species, taxonomy, *Brachyloopya decorata*, Sulawesi 8811.
 new species, taxonomy, *Brachypogon kraussi*, *Brachypogon tokunagai*, *Dasyhelea forsteri*, Solomon Is 7176.
 new species, taxonomy, *Brasiliatus labrimeris*, *Brasiliatus intermedius*, Brazil, *Brasiliatus fraterculus*, Paraguay 8752.
 new species, taxonomy, *Caledonomorpha papuana*, New Guinea 4806.
 new species, taxonomy, *Campephilocoptes atyoei*, *Campephilocoptes paraguayensis*, South America 7144.
 new species, taxonomy, *Carabidae*, Asia 3984.
 new species, taxonomy, *Carabidae*, Nepal 4798.
 new species, taxonomy, *Carnophloeus zairensis*, Zaire 8767.
 new species, taxonomy, *Cataglyphis sabulosa*, Israel 8831.

Morphology, (continued)

- new species, taxonomy, *Centriopyx mahunkorum*, *Parapiyox alienus*, West Indies, Saint Lucia 4823.
- new species, taxonomy, *Ceraleurodus duckeri*, Brazil 4015.
- new species, taxonomy, *Cervicosia brevirostris*, Nepal 7979.
- new species, taxonomy, *Chaitophorus diversitatus*, Nepal 8815.
- new species, taxonomy, *Chaitophorus horizontalis*, China, People's Rep. 4009.
- new species, taxonomy, *Chazara rangonata*, USSR, Tadzhikistan 7234.
- new species, taxonomy, *Chloeobius struempli*, *Macrotrathus polylineatus*, Sibibia Iarukumica, Apion amidanense, USSR, UdSSR 4795.
- new species, taxonomy, *Chrysmallota tobiasi*, USSR, Uzbekistan 6428.
- new species, taxonomy, *Cicadellidae*, South America 7982.
- new species, taxonomy, *Clarecola crassula*, *Strongylogobius raricornis*, USSR 6395.
- new species, taxonomy, *Claudivania miranda*, *Moelista incalpensis*, Basalys, 6 species, India, Sri Lanka 4883.
- new species, taxonomy, *Clavelochemnis beaumonti*, USSR, Turkmenistan 8823.
- new species, taxonomy, *Colaspis chapealis*, Mexico, Jalisco 8769.
- new species, taxonomy, *Coloradia velda*, USA, California, San Bernardino Mts. 6447.
- new species, taxonomy, *Compsocerus deceptor*, *Paromoeocerus stictonotus*, Brazil 6364.
- new species, taxonomy, *Conoceris parva*, Africa, South 4900.
- new species, taxonomy, *Conotelus ocellatus*, *Conotelus yayasi* 8750.
- new species, taxonomy, *Copidognathus*, Argentine Basin 8776.
- new species, taxonomy, *Corioidia lenta*, Peru 8806.
- new species, taxonomy, *Corixa ibera*, Spain, Portugal 5516.
- new species, taxonomy, *Corotoca seeveri*, Brazil 6377.
- new species, taxonomy, *Coscinoptera paucioensis*, USA, California 6384.
- new species, taxonomy, *Cosmochthonius bhutanensis*, India, Bhutan 6346.
- new species, taxonomy, *Crocoptus zavrei*, Poland 4837.
- new species, taxonomy, *Croesus persicus*, Iran 6438.
- new species, taxonomy, *Crossocenus distinguendus*, British Isles 5593.
- new species, taxonomy, *Culicoides*, Panama 3205.
- new species, taxonomy, *Culicoides*, South America 4844.
- 28 new species, taxonomy, *Curtara*, South America, Central America 7200.
- new species, taxonomy, *Cydia largo* 7224.
- new species, taxonomy, *Cyphon simplex*, Iran 3978.
- new species, taxonomy, *Delitostethus scitulus*, Mexico 3980.
- new species, taxonomy, *Demodex* 7140.
- new species, taxonomy, *Derovatellus hancocci*, Uganda 4781.
- new species, taxonomy, *Derovatellus oneri*, Congo, People's Rep. 7163.
- new species, taxonomy, *Desmopachria locchi*, USA, Florida 4791.
- new species, taxonomy, *Deuteroplebia sajaniae*, Mongolia 1629.
- new species, taxonomy, *Diapetrobia crinitus*, *Paracretioptia meridionalis*, USSR 6341.
- new species, taxonomy, *Dicranocentrus*, Nepal 6387.
- new species, taxonomy, *Dicranota flammata*, *Dicranota candelisequa*, Europe 6403.
- new species, taxonomy, *Dicyrtoma christinae*, Poland 8780.
- new species, taxonomy, *Dileptus neglectus*, Europe 7182.
- new species, taxonomy, *Diplazon beinzhi*, *Sussaba huzi* 4031.
- new species, taxonomy, *Drita pulleni*, New Guinea 4910.
- new species, taxonomy, *Discophora dodong*, Philippines, Negros I 4889.
- new species, taxonomy, *Drosophila brahmagiriensis*, *Drosophila bhagamandalensis*, India 7174.
- new species, taxonomy, *Drosophila dominici*, India, Darjeeling 8795.
- new species, taxonomy, *Drosophila neokurukawa*, India 7175.
- new species, taxonomy, *Drymosia armata*, *Drymosia spectata*, Cuba 8732.
- new species, taxonomy, *Dysaphis sharmai*, Nepal 7199.
- new species, taxonomy, *Eodynurus samalorum*, Czechoslovakia 8798.
- new species, taxonomy, *Eodynurus resili*, *Rhithrogena theischingeri*, Turkey, Iran 4006.
- new species, taxonomy, *Ectopria leechi*, USA 4788.
- new species, taxonomy, *Elatonema piloseta*, *Mesocnemis dupuyi*, Senegal 7999.
- new species, taxonomy, *Elongema speophillum*, USSR 8843.
- new species, taxonomy, *Encarsia mineo*, *Encarsia abatei*, *Eretmocerus cadabae*, Africa 4881.
- new species, taxonomy, *Encyrtus aquilus*, *Encyrtus melas*, South Africa 8824.
- new species, taxonomy, *Endomyia adae*, Asia 7169.
- new species, taxonomy, *Enoplognatha latimana*, *Enoplognatha penelope* 7152.
- new species, taxonomy, *Epanerchodus polymorphus*, USSR 6464.
- new species, taxonomy, *Eriocyndus beneficis*, India 7207.
- new species, taxonomy, *Eriophyidae*, India 7133.
- new species, taxonomy, *Esenbeckia biclausa*, *Esenbeckia hirsutipalpus*, Mexico 7965.
- new species, taxonomy, *Eupelops longisetosus*, India, Darjeeling 6349.
- new species, taxonomy, *Eupithecia exspallata*, Finland 7220.
- new species, taxonomy, *Eurytoma palustris*, *Eurytoma scabriterga*, *Eurytoma antistrophe*, *Eurytoma euneiforma*, *Eurytoma strigosa*, *Eurytoma orbicula*, North America 8825.
- new species, taxonomy, *Euthima wendtae*, Peru, Euthima araujo, *Cylicasta chionea*, Brazil, *Hesychotrypa punctata*, *Buccinoides erichsoni*, Ecuador 8758.
- new species, taxonomy, *Euxoa castanea*, *Euxoa inscripta* 8839.
- new species, taxonomy, *Exalcidion tetracanthum*, Peru 4780.
- new species, taxonomy, *Falsambleshis ibyara*, Brazil 6357.
- new species, taxonomy, *Fannia stigi*, Scandinavia 7971.
- new species, taxonomy, *Fergusonia sztygii*, India 4831.
- new species, taxonomy, *Filistata brigholii*, Mexico 8733.
- new species, taxonomy, *Friesia albithorax*, *Odontella jeremie*, Lesser Antilles 6366.
- new species, taxonomy, *Friesia hoffmannorum*, Mexico, Morelos 8781.
- new species, taxonomy, *Gabonia gabriela*, Kenya 3987.
- new species, taxonomy, *Galedonta comuta*, *Galedonta rotundicornis*, Brazil 5582.
- new species, taxonomy, *Gaumnia zachvatkini*, USSR 6348.
- new species, taxonomy, *Gambialoa edromi*, *Gambialoa lufuyi*, *Gambialoa hibici*, *Lubinia acaciae*, *Lubinia katokkyensis*, *Empoasca kanunguana*, *Empoasca nara ugandana*, Uganda, Rwenzori Natl. Park 7203.
- new species, taxonomy, *Gampsocelis ryukyuensis*, *Ryu-kyu Is.* 7238.
- new species, taxonomy, *Goera schmidt*, Thailand 8005.
- new species, taxonomy, *Gonatocerus sarawakensis*, *Polynema robusta*, Malaysia 4037.
- new species, taxonomy, *Gongrocnemis ignota*, *Gongrocnemis peruviana*, *Gongrocnemis veta*, Peru, Brazil 6454.
- new species, taxonomy, *Gonolabis bisetatus*, *Gonolabis gilesi*, *Gonolabis dentata*, Australasian Region 7959.
- new species, taxonomy, *Grechtha obsoletana*, USA, California 7993.
- new species, taxonomy, *Griposterygidae*, Australia 5609.

Morphology, (continued)

- new species, taxonomy, *Guianella nematocera*, *Guianella pilosa*, *Guianella trimaculata*, *Guianella tuberculifrons*, Panama 4858.
- new species, taxonomy, *Gyponana fortuna*, *Gyponana boquetea*, *Gyponana chiriquia*, *gyponana impeta*, Panama, Mexico 4017.
- new species, taxonomy, *Gyponinae*, South America 7984.
- new species, taxonomy, *Habitat*, *Nimbecora panderi*, USA, Southeast 4845.
- new species, taxonomy, *Habropogon capensis*, *Hermannomyia oldroydi*, Lesotho, South Africa 4832.
- new species, taxonomy, *Halacarus*, Atlantic Ocean 6343.
- new species, taxonomy, *Halidayana exserta*, *Halidayana asymmetrica* 7972.
- new species, taxonomy, *Haplacarus pandanus*, Micronesia, Yap I. 3965.
- new species, taxonomy, *Haplacarus pandanus*, Micronesia, Yap I. 8717.
- new species, taxonomy, *Hemileuca maia peigleri*, USA, Texas 6446.
- new species, taxonomy, *Hetaerina mendesi*, Argentina, Misiones, Iguazu 6452.
- new species, taxonomy, *Heterarthrus imbroensis*, *Cladardis cretica*, *Pristiphora cretica*, Crete 6427.
- new species, taxonomy, *Heterocleptes spinosus*, Borneo 4013.
- new species, taxonomy, *Heteromurus multispinatus*, Papua New Guinea 3988.
- new species, taxonomy, *Hyalidocoris elongatus*, Colombia 4804.
- new species, taxonomy, *Hydrochara simula*, USA, Wisconsin 4819.
- new species, taxonomy, *Hydroporus boreus*, North America 4774.
- new species, taxonomy, *Hylobothypus pontis*, Brazil 6401.
- new species, taxonomy, *Hyperephanus proseni*, *Schoenfeldtiopsis zikani*, Brazil 7157.
- new species, taxonomy, *Hypsopora expansa*, *Hypsopora serrata*, *Hypsopora capitulata*, Brazil, Minas Gerais 6420.
- new species, taxonomy, *Igassuoides lucidus*, *Paraluederwaldtia caramaschii*, Brazil 8738.
- new species, taxonomy, *Indophanus dakshinusi*, India, Kerala 7159.
- new species, taxonomy, *Isometrus besucheti*, *Isometrus acanthurus loebli*, Ceylon 4770.
- new species, taxonomy, *Italochrysa lobini*, *Anisochrysa tieiresis*, *Suaris piresi*, Cape Verde Islands 4059.
- new species, taxonomy, *Johnstonimyia bezi*, *Johnstonimyia gressitti*, Australasian Region 4841.
- new species, taxonomy, *Knighthonia nigroscutella*, Peru 4849.
- new species, taxonomy, *Knia chrysopelma*, Africa 6356.
- new species, taxonomy, *Labodipicola cepala*, USA, Texas 5586.
- new species, taxonomy, *Lagynodes obscuripes* 7214.
- new species, taxonomy, *Leobunum sadoense*, Japan, Sado I. 7154.
- new species, taxonomy, *Leptocera digna*, Bulgaria 8785.
- new species, taxonomy, *Leucodynerus samiatius*, North America, West 8821.
- new species, taxonomy, *Leucodynerus psophocarpae*, New Guinea 4897.
- new species, taxonomy, *Lissocephala*, Ivory Coast 1626.
- new species, taxonomy, *Lissonoschema macroculum*, Brazil 6367.
- new species, taxonomy, *Listriophorus beaumonti*, *Listriophorus myops*, *Listriophorus nitor*, *Listriophorus rarus*, *Listriophorus serratus*, *Listriophorus specials*, *Listriophorus typicus*, Neotropical Region 8756.
- new species, taxonomy, *Lojus asperus*, Ecuador 7985.
- new species, taxonomy, *Luizomyia penisi*, Brazil, Central Amazon Region 7188.
- new species, taxonomy, *Macromalthinus belemensis*, Brazil 7941.
- new species, taxonomy, *Macropsinae*, India 4861.
- new species, taxonomy, *Magaselia corkerae*, Hong Kong 7181.
- new species, taxonomy, *males*, Pirata 802.
- new species, taxonomy, *Megaselia argiopephaga* 7966.
- new species, taxonomy, *Meonura moraviae*, Czechoslovakia 6872.
- new species, taxonomy, *Metricia thyrace*, Chile 7243.
- new species, taxonomy, *Micreremus subglaber*, Japan 5519.
- new species, taxonomy, *Microlepidoptera*, Norfolk I. 4041.
- new species, taxonomy, *Microtrombicula tanzaniae*, *Whartonia novemsetosa*, Tanzania 6344.
- new species, taxonomy, *Misaglia*, Venezuela 3228.
- new species, taxonomy, *Mitonyum vockerothi*, Canada, New Brunswick 7935.
- new species, taxonomy, *Mochlynus triangularis* 8791.
- new species, taxonomy, *Monrosiaia inpai*, Brazil 6369.
- new species, taxonomy, *Monrosiaia sukata*, Brazil 6358.
- new species, taxonomy, *Monteithomyia gentilis*, New Caledonia 6417.
- new species, taxonomy, *Myapex acutus*, Chile 7178.
- new species, taxonomy, *Mycomya goethalsi*, Panama 1625.
- new species, taxonomy, *Mycomya goethalsi*, Panama, Barro Colorado 4833.
- new species, taxonomy, *Myrmica schencki starki*, *Tetramorium ferox*, *Tetramorium armatum*, *Proformica jacoti*, Mongolia, People's Rep. 8678.
- new species, taxonomy, *Nanorchestes collinus*, *Nanorchestes gilli*, *Nanorchestes jodiae*, *Nanorchestes illano*, Arctic 3963.
- new species, taxonomy, *Nanorchestes wilbanksi*, Antarctica, Marie Byrd Land 7148.
- new species, taxonomy, *Napodytes bokii*, Ecuador 6355.
- new species, taxonomy, *Nasutitermes acanagussu*, Brazil 8834.
- new species, taxonomy, *Neasterocoris spangleri*, Ecuador 6415.
- new species, taxonomy, *Nemobrenthus bechyneli*, *Nemobrenthus pereirai*, Brazil 8755.
- new species, taxonomy, *Nesareldio inyangani*, Zimbabwe 7187.
- new species, taxonomy, *Neompherta tuomikoskii*, Finland 7961.
- new species, taxonomy, *Nephapis bicolor*, *Nephapis namocia* 5560.
- new species, taxonomy, *Nepitula hexapetala*, *Nepitula szocsi*, *Bedellia ehkella*, *Paromix szocsi*, *Trifurcula gormanyi*, Hungary, Budapest 8677.
- new species, taxonomy, *Neuroctenus termittophili*, Pakistan 5577.
- new species, taxonomy, new records, *Hilpinus nearcticus*, USA 4811.
- new species, taxonomy, *Niphaolela barnae*, Thailand 7187.
- new species, taxonomy, *Niphocephalus aboriginis*, *Proteramaeus macleani*, *Aspermaeus longipilus*, USSR 7933.
- new species, taxonomy, *Niphogetia* 6399.
- new species, taxonomy, *Nocticnace taprobane*, Sri Lanka 7962.
- new species, taxonomy, *Nodopus tibialis*, North America 7951.
- new species, taxonomy, *Notmida*, Turkey 4028.
- 12 new species, taxonomy, *Notopodidae* 7136.
- new species, taxonomy, *Noxoxus bihawensis*, Tanzania 3982.
- new species, taxonomy, *Ochthebius ineditus* 5559.
- new species, taxonomy, *Oedignatha campesina*, Brazil 8735.
- new species, taxonomy, *Oedoparena minor*, Japan 7185.
- new species, taxonomy, *Oligella nana*, *Oligella intermedia*, Sweden 3977.
- new species, taxonomy, *Oligonychus senegalensis*, Senegal 6713.
- new species, taxonomy, *Ornithoda*, Greece 7142.
- new species, taxonomy, *Ornithomyia rupe*, Switzerland, Gibraltar 6405.
- new species, taxonomy, *Orthognathomeres insignis*, Brazil 6443.
- new species, taxonomy, *Pachybrachis alpinus*, France 8765.
- new species, taxonomy, *Pacifiulus imbricatus*, *Anulaculius golovatchi*, USSR

Morphology, (continued)

- 6465
new species, taxonomy, *Pagelmia amazonica*, Ecuador 4790.
new species, taxonomy, *Pamphilus lanatus* 8829.
new species, taxonomy, *Parabeta areolata*, *Parabeta callosa*, *Parabeta dubitata*, *Parabeta stylifera*, *Parabeta tapiripes*, Brazil 8840.
new species, taxonomy, *Paradamoetia chaguiula*, Panama 7149.
new species, taxonomy, *Paradmitra sutschani*, Yugoslavia 4893.
new species, taxonomy, *Paragus ascensis*, *Paragus antiohetiae*, France, Corsica, Sardinia 8791.
new species, taxonomy, *Paralimosina anaptera*, *Paralimosina franzi*, *Paralimosina gomcensis*, *Paralimosina piliferomata*, Canary Is. 7969.
new species, taxonomy, *Parapaniella eugazis*, USSR, Ukraine 7218.
new species, taxonomy, *Paraxillus divinus*, Brazil 6373.
new species, taxonomy, *Parandipyrus (zanoudakis)*, Crete 8782.
new species, taxonomy, *Paronella tijucana*, Brazil, Rio de Janeiro 8779.
new species, taxonomy, *Parvidens anida*, Namibia 4843.
new species, taxonomy, *Peoria padrella*, North America 7230.
new species, taxonomy, *Pephysia longirhynchus*, *Pephysia microlevis* 4857.
new species, taxonomy, *Peritoma bavaria*, Germany, Fed. Rep., Bavaria, Murnauer Moos 4730.
new species, taxonomy, *Perissopalla calculata*, *Perissopalla rationalis*, *Perissopalla pogi*, Venezuela 4764.
new species, taxonomy, *Perithemis rubita*, Ecuador 6451.
new species, taxonomy, *Phaonia asiatica*, USSR, Siberia 6393.
new species, taxonomy, *Phorbella*, North America 5571.
new species, taxonomy, *Phonogaster longigenuculata*, China, People's Rep. 4904.
new species, taxonomy, *Phora speighti*, Ireland 6391.
new species, taxonomy, *Phitracidae*, Brazil 3971.
new species, taxonomy, *Phyllobenus atriplex* 6360.
new species, taxonomy, *Phylloscopis*, India 3964.
new species, taxonomy, *Piccola striata*, Brazil 4899.
new species, taxonomy, *Plagioglossus ribesi*, Canada, British Columbia 4007.
new species, taxonomy, *Platyacarus oligolacis*, *Platyacarus dontocoronis* 8719.
new species, taxonomy, *Platyscutus hemibur*, Panama, Porto Bello 4848.
new species, taxonomy, *Plecoptera*, Australia 4907.
new species, taxonomy, *Placopsylla angustipes*, *Hectopsylla gracilis*, Argentina 7241.
new species, taxonomy, *Plusiocampa bonadonai pavanii*, Switzerland, Valais 4822.
new species, taxonomy, *Polana portochuela*, *Polana innata*, *Polana pravada*, *Polana bitubera*, *Polana tuberosa*, *Polana olacea*, Bolivia 8809.
new species, taxonomy, *Polana protochuela*, *Polana innata*, *Polana pravada*, *Polana bitubera*, *Polana tuberosa*, *Polana olacea*, Bolivia 5585.
new species, taxonomy, *Polyperna emia* 7978.
new species, taxonomy, *Polyzonium valeri*, *Polyzonium cyathiferum*, USSR, Siberia 6463.
new species, taxonomy, *Priochirus lankus*, *Priochirus decanus*, *Paederus besucheti*, *Paederus loebii*, *Paederus mussardi*, India, Sri Lanka 4809.
new species, taxonomy, *Priopus arensis*, *Priopus lineatus* 7957.
new species, taxonomy, *Prodansera flavifacies*, Zambia 7237.
new species, taxonomy, *Prodansera levandouvi*, USSR, Teyloye L. 6389.
new species, taxonomy, *Prokelisia dolus*, *Prokelisia caroleae*, USA 8813.
new species, taxonomy, *Prosimulium laurii*, Morocco 3993.
new species, taxonomy, *Prostolonia maritima*, Venezuela 6368.
new species, taxonomy, *Prostolonia*, South America, Amazon R. Basin 7235.
new species, taxonomy, *Protura*, USA, Alaska 4062.
new species, taxonomy, *Pseudaphyscus clavatus*, USSR, Russia, Sakhalin I. 6439.
new species, taxonomy, *Pseudanthidium micronites*, *Pachyanthidium semulitum*, *Anthidium flavofurum*, *Anthidium tergarmarginatum*, *Anthidia* 5596.
new species, taxonomy, *Pseudoclonotus*, Philippines 7191.
new species, taxonomy, *Pseudoclonotus novissimus*, *Pseudoclonotus* 8818.
new species, taxonomy, *Pseudolobus tibialis*, Costa Rica 7943.
new species, taxonomy, *Pseudomyopia punctipennis*, *Thecophora ruficornis*, Argentina 6392.
new species, taxonomy, *Pseudonympha camdeboo*, South Africa 8837.
new species, taxonomy, *Pseudopropitapha* 7946.
new species, taxonomy, *Pseudoscorpiones*, Korea 4768.
new species, taxonomy, *Pseudosyrbanis kempi*, India 7158.
new species, taxonomy, *Pseudotopocerus*, Strangalia, Central America 6385.
new species, taxonomy, *Psyllidae*, Clambidae, Denmark 4783.
new species, taxonomy, *Pycta nadleri*, Israel 8841.
new species, taxonomy, *Pycta verna*, Asia, Himalayas 8814.
new species, taxonomy, *Rachana circumdata*, *Rachana circumdata panayensis*, *Deudorix hypargyria philippensis*, Philippines 4891.
new species, taxonomy, reviews, *Roederodes* 6401.
new species, taxonomy, *Rhamphus*, France 8757.
new species, taxonomy, *Rhopalosiphonius eheidi*, India 7198.
new species, taxonomy, *Rhyacophila*, USA, California, Placer Co. 6461.
new species, taxonomy, *Rhyacophytoides*, India 1134.
new species, taxonomy, *Ricinoides megahenseni*, Ivory Coast 7156.
new species, taxonomy, *Rumicita grandicula*, *Aphara migratimacula*, *Psidylla montanica*, USSR, Transcaucasia 6423.
new species, taxonomy, *Sandersellus panamensis*, Panama 6421.
new species, taxonomy, *Saundersia glyphocopa*, Brazil 8786.
new species, taxonomy, *Satchellia vallanti*, Italy, Bornide R. 3192.
new species, taxonomy, *Scaphytopyus biflavus*, *Chlorotettix canolensis*, *Idona murrayae*, Costa Rica, Cocos I. 7981.
new species, taxonomy, *Scatopse globulicauda*, Europe, Alps 6409.
new species, taxonomy, *Scirpophaga kumbat*, *Scirpophaga nepalensis*, Nepal 7221.
new species, taxonomy, *Scromphala sudinita*, Iraq 6444.
new species, taxonomy, *Scromphala*, *Brachyptera*, Costa Rica 6352.
new species, taxonomy, *Setodes dixidensis*, *Setodes arnatus*, USA, Southeast 5612.
new species, taxonomy, *Sinentonon chui*, Korea 6459.
new species, taxonomy, *Siphonurus minnoi*, *Pseudocloeon cestum*, North America 4846.
new species, taxonomy, *Siphona ingerae*, *Siphona mesnii*, *Siphona variata*, *Siphona nudi*, Denmark, Sweden 7180.
new species, taxonomy, *Smunthrus incognitus*, USA, Florida 4821.
new species, taxonomy, *Solenopsis carolinensis*, USA, Florida 8817.
32 new species, taxonomy, South America, Central America, Guyana 7205.
8 new species, taxonomy, *Sperchon*, USSR 7131.
new species, taxonomy, *Sphaerorhynchus*, *Ameriopsis*, *Multipropia*, *Oppia*, *Tectonema*, Tahiti, Fiji, Philippines 7139.
new species, taxonomy, *Sphagoeme parensis*, *Sphagoeme suturalis*, Brazil 6381.

Morphology, (continued)

- new species, taxonomy, *Stenalia iranica*, *Mordellistenula deserticola* 6375.
new species, taxonomy, *Stenopogon*, *Mischotoma*, India 7179.
new species, taxonomy, *Stenus josefjakii*, USSR, Kazakhstan, Hungary 7952.
new species, taxonomy, *Stenomastoma ubeda*, Spain 7931.
new species, taxonomy, *Stictella faurichii*, *Stictella gillaspiei*, *Stictella villegasi* 8827.
new species, taxonomy, *Suricoteus fenecus*, Egypt 6448.
new species, taxonomy, *Symmetricha kendallorum*, USA, Texas 7992.
new species, taxonomy, *Syndocosa ekeola* 5570.
new species, taxonomy, *Systropus*, Asia 8786.
new species, taxonomy, *Tachinus*, China, People's Rep. 7173.
new species, taxonomy, *Taeniaptera terescristumae*, Brazil 7186.
new species, taxonomy, *Taeniopteryx nelsoni*, USA, Virginia 4906.
new species, taxonomy, *Tanacia cocytus visayana*, Philippines 4890.
new species, taxonomy, *Tarsonemidae*, USSR, Crimea 6342.
new species, taxonomy, *Tarsonemus*, USSR 6347.
new species, taxonomy, *Tauritermes viatus*, Brazil 8835.
new species, taxonomy, *Tectocephus*, Japan 2.
new species, taxonomy, *Tectocephus titianus*, Japan, Sado I. 7143.
new species, taxonomy, *Tegolophus kaliyani*, *Tetra lanneansii*, India 7137.
new species, taxonomy, *Telesonon punctigaster*, *Telesonon homopterale*, *Ascolous turkarakandae*, Turkey 7988.
new species, taxonomy, *Terulia woldai*, *Terulia triangularis*, Nicaragua 8805.
new species, taxonomy, *Tetrastichus escidobroter*, USA, California 7963.
new species, taxonomy, *Theridion austri*, Czechoslovakia 8737.
new species, taxonomy, *Thermococcus sibylei*, *Thermococcus zimmermani* 7953.
new species, taxonomy, *Thrips otomana* 8804.
new species, taxonomy, *Tityus*, *Tityus*, Brazil, Bahia 4769.
new species, taxonomy, *Toryba boguella*, Costa Rica, Cocos I. 4888.
new species, taxonomy, *Toxopneustia* 5584.
new species, taxonomy, *Trachymyrmex kempi*, Paraguay, Chaco Basin 5595.
new species, taxonomy, *Tramea rustica*, *Tramea minuta*, Venezuela 8000.
new species, taxonomy, *Trimessus inexpectatus*, *Trimessus beaumonti*, Turkey, Israel 8754.
new species, taxonomy, *Tropobates carri*, *Tropobates polheimi* 5578.
new species, taxonomy, *Trichaphanopsis rafikiandus*, France 8746.
new species, taxonomy, *Trichateura*, Ecuador 5611.
new species, taxonomy, *Trichura venerea* 4040.
new species, taxonomy, *Trichogramma marylandense*, USA, Maryland 5600.
new species, taxonomy, *Trichogramma schuberti*, *Trichogramma rhenaia*, France, Israel 4876.
new species, taxonomy, *Trichonyssodys cinctus*, *Trichonyssodys melasmus*, Brazil 4778.
new species, taxonomy, *Trichoptera*, Eurasia 4067.
new species, taxonomy, *Trimerina intermedia*, Italy 3997.
new species, taxonomy, *Trochilochelone michaliovi* 7947.
6 new species, taxonomy, *Trombiculidae*, Papua New Guinea 6339.
new species, taxonomy, *Trombaphysa novaebrasilis*, Papua New Guinea, New Britain 4762.
new species, taxonomy, *Trypanophellus necopinus*, Cuba 7167.
new species, taxonomy, *Trybophytus strumati*, USA, Tennessee, Warren Co. 4815.
new species, taxonomy, *Tylana nigromaculata*, *Tylana rodgersi*, *Mascarenes* 4866.
new species, taxonomy, *Typhedanus eliasi*, *Typhedanus cursinoti*, Brazil 8838.
new species, taxonomy, *Vagha blascovi*, India 2380.
new species, taxonomy, *Vandae dudleyi*, Malawi 5564.
new species, taxonomy, *Vendus sushmae*, India, West Bengal 7195.
new species, taxonomy, *Wandesia polyseta* 6345.
new species, taxonomy, *Xenelmis leechi*, *Xenelmis marcapata*, Peru 4782.
11 new species, taxonomy, *Xenelmis*, Panama 7201.
new species, taxonomy, *Zabrotes africanus* 6350.
new species, taxonomy, *Zale chisonesis* 5603.
new species, taxonomy, *Zelotocoris vicosensis*, Brazil, Vicos 4850.
new species, taxonomy, *Zepetocoris watanabei*, *Heterogasterella biseriata*, Thailand 5540.
new species, taxonomy, 11 species, *Scydmaenidae*, Ecuador, Guatemala 7936.
13 new species, taxonomy, 13 species, *Hypodius* 4816.
new species, taxonomy, 13 species, *Lamiinae*, Africa 7938.
new species, taxonomy, 13 species, USA, Mexico 6426.
new species, taxonomy, 14 species, *Aphanistes*, North America 6435.
new species, taxonomy, 15 species, *Lissonotus*, North America 6379.
new species, taxonomy, 16 species, *Lordithus*, North America, Central America 6380.
new species, taxonomy, 2 species, *Pogonomyrmex*, USA, Texas 6432.
new species, taxonomy, 28 species, *Scarabaeinae*, Panama 6376.
new species, taxonomy, 3 species, *Ambrysus*, Mexico 6416.
new species, taxonomy, 3 species, *Calcaromyza*, Africa 4766.
new species, taxonomy, 3 species, *Neosilba*, Mexico, Colombia 4702.
new species, taxonomy, 3 species, *Trichogramma*, USA, Hawaii 4021.
new species, taxonomy, 5 species, *Diachasma*, South America 7970.
new species, taxonomy, 5 species, *Eostegana*, Philippines, Papua New Guinea 3989.
new species, taxonomy, 5 species, *Systropus*, China, People's Rep., Taiwan 3991.
new species, taxonomy, 5 species, *Tarsonemini*, Ethiopia 7932.
new species, taxonomy, 6 species, *Phalantia*, India, Sri Lanka 4808.
new species, taxonomy, 66 species, *Lamiinae*, Africa 7939.
new species, taxonomy, 7 species, *Austrotrichia* 4842.
new species, taxonomy, 7 species, *Myllaena*, Nearctic Region 4742.
new species, taxonomy, 8 species, *Cerylonidae*, *Mascarenes* 4813.
new species, taxonomy, 8 species, *Hyphantus* 6361.
new species, taxonomy, 8 species, *Palaeocarya*, Papua New Guinea, Solomon Is. 4885.
new species, taxonomy, 8 species, *Pseudostegana*, Papua New Guinea, Philippines, Sulu 3990.
new species, taxonomy, 9 species, *Cyrtus*, India 4810.
new species, taxonomy, *Teinocoptes phagansii*, *Teinocoptes coryctes*, *Teinocoptes brevior*, Malaysia, India 8726.
new species, taxonomy, *Tenupalpus cupressoides*, *Tenupalpus parietophoides*, *Aegyptobia crema*, Israel 8724.
5 new species, *Tenupalpus*, India 8715.
new species, *Tepidestus breweri*, *Tropisternus jolyi*, Venezuela 3184.
new species, *Tetragnatha boninensis*, Japan, Bonin Islands 1593.
new species, *Thaumalea alina*, *Thaumalea toscana*, Europe 2428.
new species, *Thyreophagus vermicularis*, British Isles, Sicily Is. 8729.
new species, *Timberlakea signata*, *Timberlakea*, South Africa, Transvaal

Morphology, (continued)

8822
new species, *Tipula submontium*, Iberia peninsula 9469
new species, *Tonorchychnites changbinensis*, China, People's Rep. 25
new species, *Tnecorynus dudleyae*, *Tnecorynus fuliginosa*, *Bynrodes ovatus*, USA 2400
new species, *Urosalpinx yucatanensis*, *Urosalpinx meridianus*, Mexico 5599
new species, *Vargatula pacifica*, Solomon Is., Nissan I. 8730
new species, *Walchia banguangshanensis*, China, People's Rep. 7
new species, *Xestia*, North America 40
new species, *Xestiocephalinae*, South America 5588
new species, 16 species, *Cleradin*, Australia 3210
new species, 5 species, *Cemus*, China, People's Rep. 2443
new subspecies, *Carabus rutilans* jeannei 8771
new subspecies, taxonomy, *Agnes amydon*, Costa Rica 7233
new subspecies, taxonomy, *Apis mellifera adam*, Crete 4869
new subspecies, taxonomy, *Carcinopus lichenigera nuytenae*, India 4045
new subspecies, taxonomy, *Conocephalus dorsalis beyblenkoi*, USSR, Russia, Khabarovsk Region 7239
new subspecies, taxonomy, *Dimorphopterus cornutus*, Papua New Guinea 3211
new subspecies, taxonomy, food plants, *Gloveria medusa editha*, USA, California 7226
new subspecies, taxonomy, *Lepidochrysis janesi clausensi*, South Africa 5602
new subspecies, taxonomy, *Libelluloides longicornis veronensis*, Europe, Alps 4058
new subspecies, taxonomy, *Lutzomyia olmea novia*, Brazil, Manaus 4839
new subspecies, taxonomy, *Notodonta*, USSR, Caucasus 4043
new subspecies, taxonomy, *Onthophagus ruficapillus guilanensis*, Iran 7171
new subspecies, taxonomy, *Ophiophomus incurvatus aghalehensis* 8001
new subspecies, taxonomy, *Papilio indra phyllisae*, *Papilio indra panamintensis*, USA, California 7233
new subspecies, taxonomy, *Tabanus campalpis terteni*, USSR 6390
new subspecies, taxonomy, *Tnchiria venae witi*, Bulgaria 4046
new subspecies, taxonomy, *Zygaena araxis kurd*, Turkey 4051
new subspecies, taxonomy, *Zygaena ephialtes smolkana*, Greece 4732
new subspecies, taxonomy, *Zygonyx torrida insulana*, Mauritius 7906
new taxa, *Corynorhinus* 22
new taxa, taxonomy, *Batrachomorphus*, Africa 4865
new taxa, taxonomy, *Cicindelidae*, Australia 4804
nipples, sensors, abdomen, variation, taxonomy, *Tingidae* 8885
nymphs, ecological distribution, *Lednia tumana* 42
nymphs, *Perlinodes aurea* 8037
occurrence, *Colophora machinella*, British Isles, England 9446
ovaries, *Pissulus cotyus* 7426
ovary, follicles, oogenesis, *Mus mus* 2708
ovipositor, *Anastrepha striata*, *Anastrepha zernyi* 8886
palpus, taxonomic revision, *Aedius*, *Tinolestes*, *Anoediorpora* 6407
panorpid complex, evolution, taxonomy, *Panorpid* 1592
Paraliris kriebelbaueri, *Paraliris truncatus*, *Paraliris syncorus*, Oriental Region 9490
parasites, *Alectoris rufa*, *Cuculotogaster heterographus* 8050
parasites, *Belvosia bicincta*, *Pachylia sycos* 6755
parasites, *Capra hircus*, *Bovicola caprae* 8335
parasites, *Carduelis carduelis*, *Bruella densilimbia* 8048
parasites, *Carduelis carduelis*, *Menacanthus carduelis* 8049
parasites, *Cheyletidae*, *Cheyleyellidae*, *Mammalia* 92
parasites, *Colpocephalum heterosoma*, *Trinotus femoratus*, *Anaticola phoenicopteri*, *Anatocys pygaspis*, Spain 8336
parasites, comparative studies, *Eadia neutrochus*, *Eadia brevihamata* 796
parasites, *Goniodes dispar*, *Menopon pallens*, *Cuculotogaster heterographus*, *Cuculotogaster heterogrammicus*, *Goniodes colchici*, Spain, Cordoba 8045
parasites, *Goniodes dispar*, Spain, Granada 8051
parasites, hosts, *Tortrimbicula kiriocephalus*, *Pitohui kiriocephalus*, New Guinea 9468
parasites, *Iguanacarus* 9
parasites, *Menacanthus alaudae*, *Galenda cnstata* 9145
parasites, *Myrsidea rustica*, *Philopteris*, Spain 8046
parasites, new species, *Whartonia kulmadouensis*, *Dobsonia pannetensis*, *Dobsonia moluccensis*, Papua New Guinea, Iran Jaya 797
parasites, nymphs, adults, *Anas platyrhynchos*, *Freyana anatina anatina* 8030
parasites, nymphs, larvae, adults, *Tyroborus lini* 8029
parasites, *Ricinus rubeculae*, *Eriotheca rubeculae*, Spain 4103
parasites, surveys, *Orseolia oryzae*, China, People's Rep. 1013
parasites, *Tachinidae*, *Chistostegia decussata* 5189
parasites, taxonomy, *Brachynotoxus heidemanni* 32
parasites, 10 species, *Bruella*, Spain 8047
pathology, parasitism, pseudogenes, *Fornica bicolor* 8164
pest resistance role, seedlings, *Sorghum bicolor*, *Atherigona varia* soccata 7719
pests, *Acia lineatifrons*, South Africa, Western Cape Region 4944
pests, new records, *Pleciptis cardamomi*, Japan, Taiwan 2359
petiole lateral area, *Aphidius frumentarii* 7271
phages, isolation, *Apis mellifera*, *Bacillus larvae* 8138
Phenacoccus herreni, *Phenacoccus surinamensis* 1194
phenology, sexual reproduction, diapause, seasonal variations, *Listrionotus bonariensis*, New Zealand, Canterbury 1104
phenotypes, classification, 33 species, *Dichroplis* 8892
phenotypes, occurrence, *Colias cesonia*, USA 7269
phenotypes, selection, *Drosophila melanogaster* 2341
phylogeny, cladistic analysis, families, *Julida* 9441
physiology, neuroendocrine system, *Periplaneta americana* 5004
physiology, symbiosis, *Sticophilus* 5174
polymorphism, founder effect, population genetics, *Evytaeus villosus* 4462
polymorphism, larvae, *Catocala blandula* 8033
polymorphism, *Shivaphis celti*, *Myzus varians*, India 6513
population studies, biogeography, *Autographa bractea*, Spain, Catalunya 7082
population studies, biometrics, *Apis mellifera ligustica*, *Apis mellifera caucasica*, France 8058
population studies, hybrids, *Scaphandrea*, USA, Colorado 7063
population-environment relations, niche pattern, *Geocia utricularia* 3629
predators, *Coccinellidae*, *Exochomus flaviventris*, *Exochomus concavus*, *Huperaspis senegalensis*, Congo, People's Rep. 4104
Pseudolophyia 6441
pupae, *Aedes micropterus* 8872
pupae, *Dytiscus verticalis* 5155
pupae, *Geometridae* 80
pupae, larvae, *Alphorhynchites aeneus* 6488
pupae, *Pieris brassicae* 5635

Morphology, (continued)

puparia, *Anomoeceros punctulatus* 5642
Pyrrhopyge creon, South America 4939
queens, nests, *Schedorhinotermes breinlii*, Australia 1482
a radiation, *Dacus cucurbitae* 5012
a radiation effects on, *Dacus cucurbitae* 2705
records, taxonomy, *Lepidoptera*, Spain, Guadalajara 7080
redescription, *Vertagopus brevicauda*, *Vertagopus reuteri*, Canada, USSR, Siberia 7272
reproductive organs, *Atherigona soccata* 4434
reproductive organs, *Leucania separata* 4243
reproductive organs, males, phylogeny, *Formicidae* 3456
reproductive systems, females, *Gonia cinerascens* 6631
respiratory organs, larvae, *Macrolepisma mulla*, *Elmis aenea* 6537
reviews, *Chrysidae*, North America 7112
reviews, taxonomy, *Nemopteridae*, Turkey 4727
salivary gland parasites, pathology, *Babesia microti*, *Ixodes ricinus* 1005
salivary gland, toxins, *Ixodes holocyclus* 1800
scerites, *Tortricidae* 5653
segments membranes, cuticle, *Locusta migratoria migratorioides* 3271
sense organs, brush-organs, thorax, antennae, *Etiella zinckenella* 2511
sense organs, larvae, role, host plants orientation, chemotaxis, *Hylemya antiqua* 913
sense organs, sensilla, *Periplaneta americana* 4978
sense organs, *Tingidae* 4965
sensilla, *Atherigona soccata* 4131
sensilla, phylogeny, males, *Chironomidae* 4966
sensilla, reviews, *Culicidae* 8921
setae, *Aedes albopictus* 5855
setae, taxonomy, larvae, pupae, *Cermotina spicata* 1678
sex determination, adults, *Phloeosinus linnariss* 2508
sex determination, identification, *Cylindrocryptus adspersus* 1706
sex determination, pupae, *Hypsipyla robusta* 78
sex differences, identification, *Rhyzopertha dominica* 870
sex differences, *Willowsia jacobsoni*, Puerto Rico 1619
sex differentiation, *Phymatocera dahlbom* 2507
sex pheromone glands, *Lymantria dispar* 5013
Soricilethrus, *Lutritulus* 7270
species composition, check lists, *Cicindelidae*, *Carabidae*, Europe 9463
9 species, *Coprocercus*, *Paramoecerus*, Brazil 6364
species identification methodology, *Xestia* 68
species lists, *Issidae*, Turkey 4737
9 species, taxonomic revision, *Coprocercus*, *Paramoecerus*, Brazil 6364
spines, abdomen, pupae, *Thripodryx ephemeriformis* 8877
status, taxonomy, *Papilio machaonathensis* 7229
sternal gland, trail pheromone, chemical communication, *Oncophymex* 8977
sternal horn, aggressive behavior, *Doryphora punctatissima* 1982
stridulation, workers, *Leptothorax muscorum* 1921
stridulatory apparatus, bioacoustics, *Hemideina*, *Deinacrida* 5020
stridulatory apparatus, developmental stages, *Triatoma infestans* 70
stridulatory apparatus, *Merope tuber* 4112
surveys, geographical distribution, *Nyctenibidae*, Philippines 1579
surveys, *Phasodachorutinae*, Brazil 4745
symbionts, new species, *Cosmetolaelaps* 800
sympatric populations, comparison, *Schizotetranychus celarius* 4465
sympatric populations, phenotypes, *Apodemus mormo*, USA, Arizona, Santa Cruz Co. 6878
synonymy, taxonomic revision, *Tingis* 4855
syntypes, *Melathema polita* 8891
systematics, keys, *Dirhininae*, India 7212
systematics, *Orsodacne*, *Syneta* 2394
taxonomic revision, *Aedes pulchritarsis* 6404
taxonomic revision, *Araeoschizus*, *Phanocera* 7940
taxonomic revision, *Drepanotermes*, Australia 836
taxonomic revision, *Euchistus* 5583
taxonomic revision, *Euxoa comosa* 7996
taxonomic revision, keys, *Deinophloeus* 4800
taxonomic revision, keys, *Heterosternota* 4771
taxonomic revision, keys, *Hylaues* 4022
taxonomic revision, keys, *Microculex* 6408
taxonomic revision, keys, *Staphylinidae* 5558
taxonomic revision, *Metaselenia* 838
taxonomic revision, new taxa, *Disemobolus*, North America 5549
taxonomic revision, nomenclature, *Hadrodractia* 4038
taxonomic revision, *Phanoperla* 4905
taxonomic revision, *Prosimulidia*, Africa 7168
taxonomic revision, *Pseudodontotenus* 8818
taxonomic revision, *Sataspes* 7232
taxonomy, *Acanthea*, *Anoetidae*, Tunisia 2385
taxonomy, *Acanthea* alpea 1658
taxonomy, *Acrididae*, South America 1671
taxonomy, *aedeagus*, *Helicobia* 4940
taxonomy, *Alabidocarpus* minor, *Alabidocarpus nycali*, *Alabidocarpus intercalatus*, *Alabidocarpus plecoi*, Belgium 5652
taxonomy, *Alathetus* 4853
taxonomy, *Albardia*, *stibopteryx* 3226
taxonomy, *Alucia parvella* 4052
taxonomy, *Amara*, *Zezea*, France 6498
taxonomy, *Amblyseius umbraticus*, Nearctic Region, Palaearctic Region 8723
taxonomy, *Amphizoa kashimrensis* 4789
taxonomy, *Anacylostoma*, China, People's Rep. 841
taxonomy, *Anobidae*, Mediterranean Region 1604
taxonomy, *Anthomyiidae* 30
taxonomy, *Anthomyiidae*, Australia 5574
taxonomy, *Aphodius*, Italy 3981
taxonomy, *Archaeocryptini* 3183
taxonomy, *Blaste hilaris*, Spain 4908
taxonomy, *Bombus lapponicus*, *Bombus monticola* 4871
taxonomy, *Braconidae* 7215
taxonomy, *Campocleptus*, *Polypea* 4111
taxonomy, *Carabodes hungaricus* 8053
taxonomy, *Carabus* 8772
taxonomy, *Caryocolum*, Europe 4844
taxonomy, *Centruroides* 8744
taxonomy, *Cephidae*, *Tenthredinidae*, USSR 4102
taxonomy, *Chaetocoelus* 7937

Morphology, (continued)

- taxonomy, Chalcidoidea, Africa 1649.
 taxonomy, Charoxys 6365.
 taxonomy, Chloropinae 2410.
 taxonomy, Chrysogramma, Sarcotachina 4840.
 taxonomy, classification, Andrena, Japan 6433.
 taxonomy, classification, *Isophysibius sinuicrenatus*, *Isophysibius weglarskiae*.
Isophysibius volubilis 8842.
 taxonomy, classification systems, Hebridae 4860.
 taxonomy, Coleophoridae 3223.
 taxonomy, collections, Lepismatidae 4065.
 taxonomy, collections, Microcorypha 7124.
 taxonomy, collections, Nemouridae 5608.
 taxonomy, Conchaspidae 2437.
 taxonomy, Carosoma, Dasychermes 8742.
 taxonomy, Crocinia, Africa 1665.
 taxonomy, developmental genetics, Aphididae 2335.
 taxonomy, developmental stages, *Chioerla proprium* 1672.
 taxonomy, Dilaridae, Brazil, Amazon Basin 4055.
 taxonomy, Diploschizia, North America 1659.
 taxonomy, Diplunae, Australia 2389.
 taxonomy, Dirphys 4024.
 taxonomy, distribution, Glyptopterigidae 5605.
 taxonomy, Dorylinae 5425.
 taxonomy, ecological distribution, new species, *Drosophila fuma* 1628.
 taxonomy, Ectreposthoneura, Palaearctic 811.
 taxonomy, Encyrtidae 4025.
 taxonomy, *Epicauta caustica*, *Epicauta floydwerneri*, new species, *Epicauta brasileira*, *Epicauta crucera* 2496.
 taxonomy, Eremobates, USA 1595.
 taxonomy, Eremotylus, Simopion 4026.
 taxonomy, Eupetura 5597.
 taxonomy, *Euryurus massusipiensis* 4911.
 taxonomy, females, *Dendrolimus benderi*, India 4739.
 taxonomy, females, *Psilopsocus pulchripennis* 1676.
 taxonomy, fossils, Keroplatidae, Mycetophilidae, France 1623.
 taxonomy, fossils, *Trigona dominicana*, Dominican Republic 6335.
 taxonomy, *Frankliniella bruneri* 1677.
 taxonomy, Friesia, Mexico 4820.
 taxonomy, genetic analysis, *Anopheles marshalli* 5566.
 taxonomy, Geocoroides, India 7193.
 taxonomy, geographical distribution, *Acnema* 6402.
 taxonomy, geographical distribution, *Aenictus decolor* 38.
 taxonomy, geographical distribution, *Agra* 4792.
 taxonomy, geographical distribution, *Ancadella 6531*.
 taxonomy, geographical distribution, *Muellerianella* 7204.
 taxonomy, geographical distribution, new species, new genera, *Pocciococcus longilobus*, Australia 827.
 taxonomy, geographical distribution, *Parakanchia*, *Soreutoneura*, New Guinea 837.
 taxonomy, geographical distribution, *Tartessinae*, New Guinea, Australia 7884.
 taxonomy, geographical distribution, *Uncia* 6371.
 taxonomy, Geometridae, Noctuidae 4894.
 taxonomy, *Halotanytarsus tika* 818.
 taxonomy, Hastella, Australia 2473.
 taxonomy, Hemiptera, Australia, Northern Territory 3208.
 taxonomy, Histeridae, New Guinea 2393.
 taxonomy, Homoptera, Czechoslovakia 3213.
 taxonomy, Hoplia, North Africa 1600.
 taxonomy, host plants, reviews, Gelechiidae 4896.
 taxonomy, hybridization, subspecies, *Euxoa comosa* 7998.
 taxonomy, hybrids, *Lasius niger*, *Lasius alienus* 3217.
 taxonomy, Hydrizon, *Pxyllommatidae* 1647.
 taxonomy, Hydroptila, Nearctic Region 1673.
 taxonomy, Hypodidae 2383.
 taxonomy, identification, *Nonarthra cynanum*, Panama 7126.
 taxonomy, identification, *Oecetis disjuncta*, *Oecetis avara* 8004.
 taxonomy, identification, *Pseudomethoca proguina*, USA, Montana 4295.
 taxonomy, *Iridin* 8035.
 taxonomy, *Iserius* 4747.
 taxonomy, *Isoedermis planus*, Tasmania 4010.
 taxonomy, *Jassidae* 6419.
 taxonomy, keys, *Acampocladius* 4828.
 taxonomy, keys, *Achryson* 6362.
 taxonomy, keys, *Anister* 6366.
 taxonomy, keys, *Ascalaphidae* 4057.
 taxonomy, keys, *Ascalaphidae*, Brazil, Amazon Basin 4056.
 taxonomy, keys, *Australophlebotomus* 3195.
 taxonomy, keys, *Austrorestus*, Australia 826.
 taxonomy, keys, *Banasa* 6418.
 taxonomy, keys, *Brueelia* 6449.
 taxonomy, keys, *Calolampa* 4903.
 taxonomy, keys, *Calypsoptera* 26.
 taxonomy, keys, *Cerocephala rufa*, *Cerocephala ecocypogasteri* 2459.
 taxonomy, keys, *Crepicardus*, Madagascar 4797.
 taxonomy, keys, *Curculionidae*, *Rhynchophoridae*, *Ogasawara Is.* 3979.
 taxonomy, keys, *Dilophus*, North Africa 4836.
 taxonomy, keys, *Dolichotarsus* 5591.
 taxonomy, keys, *Dolichovespula sylvestris* 4036.
 taxonomy, keys, *Epicypa* 4005.
 taxonomy, keys, *Eumidea* 6340.
 taxonomy, keys, *Forcipomyia* 8054.
 taxonomy, keys, *Frenchia* 3216.
 taxonomy, keys, geographical distribution, *Pogonomyrmex* 7217.
 taxonomy, keys, *Lagurus*, France 8761.
 taxonomy, keys, *Larinia* 4773.
 taxonomy, keys, *Leconadiazus* 6425.
 taxonomy, keys, *Leptotrombidium*, China, People's Rep. 3148.
 taxonomy, keys, *Leucospis*, India 7216.
 taxonomy, keys, *Macrotonini* 1602.
 taxonomy, keys, *Microdon* 2427.
 taxonomy, keys, *Micropedidae*, South America, Amazon R. Basin 4830.
 taxonomy, keys, *Monanus*, India 7161.
 taxonomy, keys, *Notobanchoera* 3202.
 taxonomy, keys, *Paraclemens* 4898.
 taxonomy, keys, *Peltoperidae* 6458.
 taxonomy, keys, *Planococcus ficus*, *Trionymus lounsburyi* 6514.

Morphology, (continued)

- taxonomy, keys, *Psyllaephagus* 4113.
 taxonomy, keys, *Rhombognathus* 6351.
 taxonomy, keys, synonymy, *Tricorynus herbarius*, *Tricorynus rubiventris*.
Tricorynus subgenus, *Tricorynus distinctus* 2403.
 taxonomy, keys, *Trichomyrma* 5565.
 taxonomy, keys, *Troza* 2438.
 taxonomy, keys, *Trypoxylon* 4882.
 taxonomy, keys, *Urosigalphus* 5594.
 taxonomy, keys, *Xyleborini*, Hawaii 7165.
 taxonomy, *Laetana* 5561.
 taxonomy, larvae, *Ischnura gemata* 1667.
 taxonomy, larvae, phylogeny, *Poliposus herculeanus* 5556.
 taxonomy, life cycle, new species, *Rhipicephalus zambezianus*, Africa 2377.
 taxonomy, Lignyodes, Turkey 4802.
 taxonomy, *Limosina* 2417.
 taxonomy, Lithobiidae, Asia 4069.
 taxonomy, Macdonnoia, USA, Florida 3207.
 taxonomy, Mesostigmata, Nigeria 1588.
 taxonomy, *Michaelinae* 7145.
 taxonomy, *Monostera* 1636.
 taxonomy, museum collections, *Bombylidae* 8783.
 taxonomy, museum collections, *Scolopendridae* 4068.
 taxonomy, *Neobidessus*, South America 4817.
 taxonomy, *Neotetrastopus johnsonophorus*, *Linognathoides* 8745.
 taxonomy, *Nepoculidae*, Cyprus 4814.
 taxonomy, new genera, *Anthobija*, *Anthomyidae* 816.
 taxonomy, new genera, *Astromoides* 2469.
 taxonomy, new genera, *Hulechius*, USA, Arizona, Mexico 4784.
 taxonomy, new genera, *Neopodonomus* 4827.
 taxonomy, new genera, *Neopetraspis*, East Asia 1643.
 taxonomy, new genera, new species, *Aleurophilus americanus* 2456.
 taxonomy, new genera, new species, *Dadacraga*, Madagascar 3209.
 taxonomy, new genera, new species, *Edovum putleri*, Colombia 2454.
 taxonomy, new genera, new species, *Pythopsis platara*, Ecuador 835.
 taxonomy, new genera, new species, *Vetinae* 4014.
 taxonomy, new genera, *Paraburpes*, *Sotekia* 7155.
 taxonomy, new genera, *Pseudodictyonocentrus circulus*, *Pseudodictyonocentrus christianseni* 3191.
 taxonomy, new records, *Acarina*, India, Bihar 4765.
 taxonomy, new records, *Anthomyidae*, Japan 7177.
 taxonomy, new records, *Corixidae*, Papua New Guinea, New Caledonia 8800.
 taxonomy, new records, *Naphidius*, India 7194.
 taxonomy, new species, *Acanthomyia hungaricus*, Hungary 2441.
 taxonomy, new species, *Acanthoscelus compus*, *Acanthoscelus caracalae*, Argentina 3186.
 taxonomy, new species, *Amblyseus namborensis*, *Amblyseus fletcheri*, Australia 789.
 taxonomy, new species, *Anagris achrasella*, India 2465.
 taxonomy, new species, *Anchylorhynchus bicarinatus* 1614.
 taxonomy, new species, *Antenius hoguei*, Mexico, Socorro Island 1607.
 taxonomy, new species, *Archipsocus perplexus*, Angola 848.
 taxonomy, new species, *Atrenurus*, India 2378.
 taxonomy, new species, *Attergonia*, *Actiochaeta*, India 822.
 taxonomy, new species, *Bombylus californicus*, *Bombylus halli*, *Bombylus valculet* 1622.
 taxonomy, new species, *Chionanthobius darlingtoni*, Cuba 1606.
 taxonomy, new species, *Chindropsis azorensis*, *Apterygotrips gilvipes*, Azores, Canary Islands 849.
 taxonomy, new species, *Chudalpa meridionalis*, Australia, Western Australia 4899.
 taxonomy, new species, *Cinara chaetostriata*, India, Simla 1642.
 taxonomy, new species, *Cionomimus* 1597.
 taxonomy, new species, *Coccus elatensis*, Israel 2442.
 taxonomy, new species, color, *Bourletella gibbosa*, USA, South Carolina 1620.
 taxonomy, new species, *Compteromyia coenensis*, USA, South Carolina 3194.
 taxonomy, new species, *Conopteromyia*, North America 845.
 taxonomy, new species, *Conopteromyia latistylus*, *Conopteromyia ceylonica*, Sri Lanka 4901.
 taxonomy, new species, Costa Rica, *Epilampra involutis*, *Epilampra belli*, *Epilampra unistata*, *Epilampra rothi* 2471.
 taxonomy, new species, *Cryptoxilus lymanoti* 2451.
 taxonomy, new species, *Dela*, China, People's Rep. 820.
 taxonomy, new species, *Demaptera* 2406.
 taxonomy, new species, *Deroatlus hancocci* 1615.
 taxonomy, new species, *Duculacarus turgescentis*, Indonesia 2387.
 taxonomy, new species, *Euphyrys evae*, *Salticidae*, India 801.
 taxonomy, new species, *Frankliniella georgiensis*, USA, Georgia 3233.
 taxonomy, new species, *Gypsona*, Bolivia 2440.
 taxonomy, new species, *Hydra annectens*, *Hydra lenta*, South America 3167.
 taxonomy, new species, *Hypodusa himalayensis*, India 3172.
 taxonomy, new species, *Ivireia*, USA, Texas 3221.
 taxonomy, new species, *Janomima ibandana*, Africa 840.
 taxonomy, new species, *Jenkunshella*, Asia 3200.
 taxonomy, new species, keys, *Rhagoletomyia uniformis*, USA, Texas 2420.
 taxonomy, new species, *Kobozu multumtuberculata*, India, West Bengal 1613.
 taxonomy, new species, *Lamora hemi*, India 1663.
 taxonomy, new species, *Laternaria orizabensis*, *Impatiens americanus*, Mexico 4861.
 taxonomy, new species, *Lepidophora trypoxylon* 2414.
 taxonomy, new species, *Leuctra szczytkoi*, USA, Louisiana 1675.
 taxonomy, new species, *Liopilio yukon*, USA, Alaska 5551.
 taxonomy, new species, *Marasmius patnalis*, Southeast Asia 842.
 taxonomy, new species, *Maniophrys caracalae*, USA, Texas 5604.
 taxonomy, new species, morphology, *Schoengastia niobe*, Papua New Guinea 4763.
 taxonomy, new species, *Nanorchestes*, Arctic 8721.
 taxonomy, new species, *Nemoura klapperichii*, China, People's Rep. 3230.
 taxonomy, new species, *Neoperla*, India 7240.
 taxonomy, new species, new genera, *Kesselmia chandleri*, Czechoslovakia 4003.
 taxonomy, new species, new genera, *Neonarchestes*, USA, Texas, Padre I. 2381.
 taxonomy, new species, new genera, *Rhychnaeninae*, India 7172.
 taxonomy, new species, new records, *Trichoptera*, Finland 1570.
 taxonomy, new species, *Ophiogomphus acuminatus*, Tennessee 3229.
 taxonomy, new species, *Oxyethira dunbartoniensis*, *Oxyethira sinisignae*, *Oxyethira*

Morphology, (continued)

- leonesis, USA 850.
 taxonomy, new species, *Pegsela sandhii*, India 823.
 taxonomy, new species, *Protomyobia indianensis*, USA, Indiana 1591.
 taxonomy, new species, *Protramassalia*, India, Kashmir 1641.
 taxonomy, new species, *Pseudachorutes quadrisetosus*, USA, Florida 1618.
 taxonomy, new species, *Pseudaphycus*, Mexico 2446.
 taxonomy, new species, *Pseudoschoengastia dispariparvus*, parasites, hosts, *Heteromys desmanestus* 1590.
 taxonomy, new species, *Quedius repens*, USA, Oregon 2399.
 taxonomy, new species, *Rhabdypis* 3218.
 taxonomy, new species, *Sasacarus inca*, parasites, *Lestoros inca*, Peru 1587.
 taxonomy, new species, *Schoengastia rupe*, Papua New Guinea 4763.
 taxonomy, new species, *Sesioplex californicus*, *Sesioplex depressus*, North America 2453.
 taxonomy, new species, *Siphonurus demaryi*, Canada, Nova Scotia 1632.
 taxonomy, new species, *Sminthurus carolinensis*, USA, South Carolina 1617.
 taxonomy, new species, *Sphodrin*, Nepal 808.
 taxonomy, new species, *Sukunahikona popei*, India 3180.
 taxonomy, new species, *Tabanidae*, China, People's Rep 814.
 taxonomy, new species, *Teles crassifemur*, *Teles neptuni*, *Teles niger*, *Teles punctifrons*, *Teles tercolia*, *Teles villus* 2461.
 taxonomy, new species, *Trichogramma evanescens* 2455.
 taxonomy, new species, *Trichogramma jaluani*, USA, New York 4867.
 taxonomy, new species, *Trisetacus abietivagans*, *Eriophyes chibaensis*, Japan 3170.
 taxonomy, new species, USA, Louisiana, *Abgrallaspis lirioidendri* 1637.
 taxonomy, new taxa, *Desmopachia* 3188.
 taxonomy, new taxa, *Macropsini* 3212.
 taxonomy, nomenclature, lectotypes, *Allygus communis* 7980.
 taxonomy, *Notochaeta bufoinivora*, *Emblemaeona erro*, America 4926.
 taxonomy, *Notodontidae*, Africa 4039.
 taxonomy, *Nyctophyllus ocellatus* 6382.
 taxonomy, ocelli, *Isometopus* 5579.
 taxonomy, *Odoitodrasus* 5548.
 taxonomy, *Olethreutinae*, Madagascar 843.
 taxonomy, *Oreodomyia albertae* 8792.
 taxonomy, *Pachymenae*, Brazil 6374.
 taxonomy, *Paragneuta* 6456.
 taxonomy, *Parandnae* 6372.
 taxonomy, *Pericopinae*, *Anillus* 5606.
 taxonomy, pest outbreaks, *Pulvinaria icerya*, Mauritius 3820.
 taxonomy, *Pherbellia*, North America 3203.
 taxonomy, *Pherbina coryleti*, *Pherbina intermedia*, *Pherbina mediterranea*, *Pherbina testacea* 6323.
 taxonomy, *Philotarsidae*, East Africa 4063.
 taxonomy, phylogeny, distribution, *Agra* 4793.
 taxonomy, phylogeny, *luridae* 5554.
 taxonomy, phylogeny, *Megacanthopsis* 7202.
 taxonomy, phylogeny, *Sophothrips* 5610.
 taxonomy, phylogeny, *Stetholoides* 3185.
 taxonomy, *Pleurophorus pannonicus* 8764.
 taxonomy, *Podagronia* 1654.
 taxonomy, *Proctotrupidae* 4020.
 taxonomy, *Pselaphidae*, Kenya 1605.
 taxonomy, *Psocidae*, New Guinea 3232.
 taxonomy, *Psocoptera*, Costa Rica 6460.
 taxonomy, *Psychodopus squamiventris squamiventris*, *Psychodopus squamiventris maripensis*, Brazil, Amazonia 5573.
 taxonomy, *Ptilonera bidorsalis* 6507.
 taxonomy, rare species, *Platylabus strigosus*, *Platylabusinae* 15.
 taxonomy, reviews, *Isoptera*, India 5427.
 taxonomy, reviews, keys, *Geomydoecus californicus* 85.
 taxonomy, *Saissetia hemisphaerica* 9095.
 taxonomy, *Sepsis*, Italy 3998.
 taxonomy, *Shistocerca americana* 2470.
 taxonomy, *Simuliidae* 3995.
 taxonomy, *Sisyridae*, Brazil, Amazon Basin 4054.
 taxonomy, speciation, *Spinodoneutes* 1563.
 taxonomy, species composition, *Trichoptera*, Australia, Southwest 7244.
 taxonomy, *Staphylinidae* 3181.
 taxonomy, *Staphylinidae*, Asia 4812.
 taxonomy, *Staphylinidae*, Galapagos Islands 1611.
 taxonomy, status, *Dendrocerus solarii* 7211.
 taxonomy, surveys, *Braconidae*, Tunisia 2449.
 taxonomy, surveys, *Tingidae*, Gambia, Senegal 4012.
 taxonomy, *Symphyla*, Sri Lanka 5598.
 taxonomy, synonymy, *Blaps lethifera*, *Blaps abdita* 8770.
 taxonomy, synonymy, *Brachycephalus*, *Dysmesus* 3236.
 taxonomy, synonymy, *Caloptilia tetratrypa*, *Caloptilia octopunctata* 7219.
 taxonomy, synonymy, *Depressaria* 7225.
 taxonomy, synonymy, *Diplolepis rosae* 1645.
 taxonomy, synonymy, *Epicauta* 5562.
 taxonomy, synonymy, *Ichneumonidae* 4870.
 taxonomy, synonymy, *Misolampidius clavivorus*, *Misolampidius okumurai* 8773.
 taxonomy, synonymy, *Sciomyzidae* 4825.
 taxonomy, synonymy, *Synemomyia bicolor*, *Synemomyia americana* 5547.
 taxonomy, synonymy, *Tanytarsus bernhardi*, *Tanytarsus longitarsis* 4829.
 taxonomy, *Tabanus sulcifrons* 28.
 taxonomy, *Taeniaptera*, Brazil 3992.
 taxonomy, *Tetracyclus borealis* 2452.
 taxonomy, *Thalaina*, *Thalainodes*, *Macqueuina*, new species, *Thalaina kimba*, New South Wales 322.
 taxonomy, *Theraphosidae*, Costa Rica 3173.
 taxonomy, *Tineidae* 4053.
 taxonomy, *Tingidae*, Africa 1633.
 taxonomy, *Triatoma*, Cuba 5536.
 taxonomy, *Trichoclypta* 3975.
 taxonomy, *Trichopria* 4868.
 taxonomy, *Trybliographa* 4879.
 taxonomy, *Typoxylon*, Formosa 4884.
 taxonomy, *Tychius haematopus* 6303.
 taxonomy, types, *Salicidae* 8734.
 taxonomy, types, *Trechus distigma* 8762.
 taxonomy, *Uroplata*, geographical distribution 2401.
 taxonomy, *Xolalgidae* 2382.

Morphology, (continued)

- taxonomy, 9 new species, *Cochlochla* 8803.
 taxonomy, *Sphinx minos* 4047.
 teratogenesis, *Thrasia lotus*, USA, Colorado 3263.
 teratology, *Tachinus axillaris*, *Staphylinidae* 1719.
Tetanocera montana, Belgium 9485.
Thylodius contractus 1703.
 trachea, respiration, *Peniplaneta americana* 4987.
 trail pheromone glands, *Camponotus ephippium* 8978.
Trichogramma perkinsi, *Trichogramma japonicum*, USA, Hawaii 4021.
Tricholeiochiton, Australia 8703.
 types, *Maniola jurtina splendida* 8889.
 types, *Rhopalurus princeps* 8883.
 ultrastructure, fat body, giant nephrocytes, *Bombix mori* 3267.
 ultrastructure, *Spinulicidae* 7279.
 urticant apparatus, *Hyletia urticae*, *Hyletia umbrata* 6515.
 variations, environmental factors, *Pycnosyche guttifer*, Canada, Quebec, Matamek R. 8605.
 variations, zoogeography, intraspecific relationships, *Decticus verrucivorus*, *Decticus albifrons* 4701.
 venom gland skeleton, *Andrenidae* 93.
 venom glands, *Butus famulus* 8981.
 wings, aging effects on, *Zapionus paravitiger* 6508.
 wings, *Apelinius*, *Mesidia*, *Mesidiopsis* 4108.
 wings, aptery, environmental effects, habitat, *Trox* 4954.
 wings coloration, classification, *Trimerotropis sparsa*, USA, Nebraska 8890.
 wings, fossils, Cretaceous period, *Phasma*, Greenland 4752.
 wings, hamuli, taxonomy, *Braconinae* 7277.
 wings, mimicry, predation effects on, *Lycanidae* 2786.
 wings, taxonomy 1.
 wings, taxonomy, *Bruchidae* 7166.
 wings, temperature-sensitive mutant, *Drosophila melanogaster* 1533.
 wings venation, comparative studies, *Coleoptera* 73.
 wings, venation, *Orthetrum triangulare* 6512.
 workers, keys, identification, *Formica rufa*, Sweden 4106.
Morphology (organisms),
 new species, *Edwardsina confusa*, Australia, New South Wales 3193.
Morphometry,
 antennae, *Trichoplusia ni* 3257.
 body size, allometry, *Culicoides* 2506.
 digestive tract cells, factors affecting ribosomes distribution, *Aedes aegypti* 923.
 eye, cells, *Calliphora erythrocephala* 3288.
 heritability, age effects, *Drosophila melanogaster* 2689.
 hindgut epithelium, *Notonecta glauca* 3310.
 leg bristles, speciation, *Drosophila albistriata*, Hawaii 6294.
 reproduction, growth regulators, females, *Culex pipiens*, effects on 360.
 wings, mimicry, identification, *Niagara lucifera* 5640.
Morristonia peracuta,
 synonymy, taxonomy, *Persectania aversa* 3224.
Mortality,
 adjuvants effects on, *Baculovirus heliothis*, *Heliothis zea* 3450.
 aflatoxins, *Drosophila melanogaster* 5803.
 aggregation behavior, larvae, *Euphydryas phaeton* 7612.
 Allium sativum extracts effects on, *Syrphus corollae*, *Chrysopa carnea*, *Coccinella septempunctata* 9025.
 Amsacta moorei, chemical control, insecticides, monoterpenes 1844.
 apiculture, pesticides, USA, New York 7752.
 artificial diets, DIMBOA, effects on, *Ostrinia nubilalis* 9306.
 bioassays, nuclear polyhedrosis virus, *Neodiprion sertifer* 5722.
 bioassays, spores, crystals, *Bacillus thuringiensis*, *Ostrinia nubilalis* 5780.
 biological control, pathogens, *Bacillus thuringiensis*, *Diachasma obliqua* 2985.
 biological control, weed control, *Rumex obtusifolius*, *Gastrophysa atrocyanica* 5985.
 Cameraria, population density, population regulation, host plants, *Quercus nigra* 2134.
 carbofuran, diets, *Apis mellifera* 6201.
 chemical control, fumigants, *Anastrepha suspensa* 3444.
 chemical control, isostereyl alcohol, surface films, *Anopheles quadrimaculatus*, efficacy 6128.
 colonies, *Chalcidocera muraria*, Poland 9363.
 colonies, chalkbrood disease, *Apis mellifera* 1803.
 competition, *Callosobruchus maculatus*, *Callosobruchus chinensis* 5231.
 correlation, segregation chromosomes, *Drosophila melanogaster* 3090.
 crowding effects on, *Ootrychus sulcatus* 431.
 development, environmental effects, temperature, relative humidity, *Coryra cephalonica* 1127.
 development, predators, foraging behavior, larvae, *Chrysopa carnea*, *Hippodamia convergens* 2870.
 developmental stages, crop flies, *Anthonomus grandis grandis*, *Gossypium*, USA, Texas 6125.
 developmental stages, environmental effects, *Oulema melanopus* 1112.
 developmental stages, predators, *Musca vetustissima*, *Arthropoda*, Australia 2880.
 diets effects on, *Acrotylus insubricus* 2693.
 diets effects on, nutrient sources, proteins, sucrose, *Anthonomus grandis grandis* 8276.
 dose dependency, temperature effects, pest control, *Rhyzopertha dominica* 237.
 egg production, overwintering, *Rhopalosiphum padi*, Finland 5225.
 eggs, larvae, oviducts, methomyl, *Heliothis punctiger*, *Heliothis armiger* 5380.
 eggs, parasitoids infestation, *Malacosoma americanum* 8314.
 eggs, predators, *Empoasca fabae* 6046.
 electrophoretic effects on, power lines, colonies, *Apis mellifera* 1866.
 emergence, workers, queens age effects on, *Apis mellifera* 8595.
 environmental effects, aggregation, crowding, larvae, *Argemone nigra*, *Argemone nigra* 2696.
 experimental infection, *Tonulopsis apicola*, *Apis mellifera* 1808.
 fecundity, cultivars pest resistance, *Sorghum*, *Aberigona soccata* 4565.
 feeding behavior effects on, pathogens, biological control, *Bacillus sphaericus*, *Culicidae* 1382.
 feeding, stored products pests, temperature, *Stiphilus granarius* 6112.
 food quality, host plants, leaves, *Zanthoxylum ailanthoides*, *Papilio xuthus* 7563.
 fumigation, methyl bromide, wood, *Ulmus*, *Scolytus multistriatus* 8491.
 fumigation, phosphine, *Phoenix dactylifera*, *Insecta* 8535.
 Gracillanidae, larvae, plant hosts, *Quercus* 2135.
 growth regulators effects on, stored products pest control, *Coleoptera* 3787.
 herbivores, host plants, leaves, abscission, *Insecta* 5240.

Mortality, (continued)

- herbivores, interspecific relationships, competition, *Notostira elongata*,
Megalocera recticornis 3631
 host plants physical properties effects on, *Gossypium hirsutum*, *Anthonomus grandis* 6115
 infection, larvae, *Bacillus thuringiensis*, *Aedes aegypti* 3423
 infection, *Neoplectana carapacea*, *Ctenocephalides felis* 6612
 infection, nuclear polyhedrosis virus, *Anticarsia gemmatilis*, *Pseudoplusia includens* 1826
 infection, parasites, *Plasmodium cynomolgi*, *Anopheles duri* 5749
 infection, pathogens, *Nomuraea rileyi*, *Trichoplusia ni*, *Anticarsia gemmatilis* 5755
 infection, rickettsia-like organisms, *Trichoplusia ni*, USA, California 5731
 infection, blood meals, *Aedes sollicitans*, *Bos indicus*, USA, Texas 3660
 infestation, *Confinteria*, *Insecta*, USA, Colorado 7551
 infestation, forests, *Choristoneura fumiferana*, *Aedes balsamea*, *Picea glauca*, Canada, Quebec 3036
 infestation, *Lampropholis delicata*, *Uroactinia* 2885
 infestation, parasites, *Hexameris glossinae*, *Glossina* 9213
 insecticides, efficacy, *Blissus leucopictus leucopictus* 5771
 larvae, benzamide effects on, *Stomoxys calcitrans* 1128
 larvae, *Culex quinquefasciatus*, toxins effects on, *Chlorella ellipsoidea* 1353
 larvae, food plants effects on, *Diastris obliqua* 7561
 larvae, *Heliothis punctiger*, nuclear polyhedrosis virus, transmission, predation, *Ocellularia schellenbergii* 1029
 larvae, nuclear polyhedrosis virus, *Spodoptera exempta* 268
 larvae, pathogenicity, *Vairimorpha necatrix*, *Oniscus aspidius* 8168
 larvae, pathogens, *Bacillus thuringiensis*, *Culicoides* 630
 larvae, pathogens effects on, *Spiroplasma*, *Galleria mellonella* 2648
 larvae, pathology, granulosis virus, *Dicia nigricans*, *Apia pomonella* 272
 larvae, pathology, granulosis virus, *Pieris brassicae*, *Pieris rapae* 270
 larvae, pathology, nuclear polyhedrosis virus, *Spodoptera exempta* 271
 larvae, pathology, nuclear polyhedrosis virus, *Trichoplusia ni*, *Galleria mellonella* 269
 larvae, pests, orchards, *Dacus oleae*, *Olea europaea*, Crete 7798
 larvae, population dynamics, *Danaus plexippus*, *Danais chrysippus* 7610
 larvae, rearing, *Citheronia regalis* 7620
 larvae, *Synthedon salmachus*, New Zealand 4415
 larvae, winter, temperature effects, *Isodes icinus*, Ireland 1126
 leaf area reduction, herbivory, *Chamaedaphne calyculata*, *Copitodiscia kalmii* 530
 life cycle, host plants, *Phyllonorycter messanella*, Australia 3554
 metamorphosis, pest control, juvenile hormones, endocrinology, precocenes, *Insecta* 8442
Musca autumnalis, predator-prey interactions, *Ravinia lymanis* 1314
 natural enemies, insecticides effects on, *Tetranychus turkestanus* 2893
 nuclear polyhedrosis virus infection, *Diastris obliqua* 7389
 overwintering, crop fields, *Colomegilla maculata* lengi, Canada, Ontario 6021
 overwintering, eggs, environmental effects, *Rhopalosiphum padi* 2682
 overwintering, emergence, crop fields, *Cylindrocapsa adspersa* 5896
 parasites infestation, *Ovis*, *Ctenocephalides canis* 7631
 parasites, predation effects on, *Blaesoxipha*, *Melanoplus sanguinipes* 6027
 parasitoids effects on, *Xanthotarsus politus*, USA, New Jersey 3034
 parathion-methyl, comparison, *Apis mellifera* 312
 pathogenicity, *Bacillus thuringiensis*, *Culex quinque fasciatus* 3422
 pathogenicity, biological control, *Metarhizium anisopliae*, *Nasutitermes exitiosus* 8165
 pathogenicity, chronic stunt virus, *Ameloylo tritiae* 5759
 pathogens, biological control, *Bacillus thuringiensis*, *Spodoptera littoralis* 2643
 pathogens effects on, *Sitophilus zeamais* 2039
 pathogens, infection, nuclear polyhedrosis virus, *Pseudoplusia melandrus* 7390
 pest control, pesticide resistance, *Haemaphysa irritans* exiguus, Australia 3430
 pest control, susceptibility, infection, *Vairimorpha necatrix*, *Lepidoptera* 2965
 pesticide applications, apiculture, *Apis mellifera* 6937
 pests, galls, forests, *Dasineura laticornis*, USSR, Siberia 6940
 population decline, surveys, *Saiaetta oleae* 3620
 population dynamics, *Aedes africanus*, Uganda 8369
 population dynamics, environmental effects, *Chironomus tentaculatus* 7601
 population dynamics, killing power, mathematical models, *Insecta* 3638
 population dynamics, life cycle, *Magiciada septendecim* 8401
 population dynamics, sampling, *Melanoplus sanguinipes* 5994
 population dynamics, seasonal variations, population regulation, *Heteronychus arator*, New Zealand, North Is. 1301
 population dynamics, *Trypoxylon palliditarsis*, Trinidad 2892
 population ecology, parasitism, *Hymenoptera*, *Ladoga camilla*, British Isles, England 6009
 population growth, pollen diets effects on, *Amblyseius hibisci* 7572
 population regulation, factors affecting, food availability, temperature effects, *Dendroctonus ponderosa* 1299
 population studies, mathematical analysis, *Culicoides* 4090
 predation, developmental stages, *Gastrophysa polygoni*, British Isles 8396
 predation, larvae, *Spiralaria imparilis*, Japan 2165
 predators effects on, pupae, *Choristoneura occidentalis* 6083
 predators, parasitoids, larvae, *Dacus oleae* 7607
 pupae, temperature effects, *Cochliomyia hominivorax* 1868
 queens, sex ratio, workers production, *Apterogaster dentigerum* 3047
 y-radiation, temperature effects, *Pogonomyrmex owyheei* 1167
 rearing, *Argasidae* 8847
 rearing, source effects on, *Glossina pallidipes*, Kenya 574
 reproduction, activity patterns, plantations, *Pissodes strobi* 2161
 soil temperature effects on, *Pectonophora gossypiella* 6167
 stored products pests, atmospheric conditions effects on, *Acarina* 1395
 y-radiation, *Wohlfahrtia opaca*, juveniles, *Asia clypeata*, *Asia discors*, Canada, Saskatchewan 5190
 susceptibility, pathogens, *Feltia subterranea*, *Spodoptera frugiperda*, *Heliothis zea* 9011
 susceptibility, pathogens, larvae, *Choristoneura fumiferana*, *Heterorhabditis heliothis* 9014
 synergists, pipernoil butoxide, MGK 264, DEF, insecticides, eldrid, methomyl, *Spodoptera littoralis* 9073
 temperature effects, eggs, *Entomoseius americana* 2876
 temperature effects, parasitism, *Galleria mellonella* 1814
 temperature-sensitive mutant, morphology, *Drosophila melanogaster* 1533
 toxicity, pest control, insecticides, *Pentatomia nigronervosa* 1843
 toxicity tests, instars, *Culex pipiens*, *Culex salinarius*, *Bacillus sphaericus*

Mortality, (continued)

- 1842
Trachyspermum ammi oils effects on, *Aedes aegypti* 6623
 traps, *Apocrita* 5615
 vectors, parasites, *Babesia bigemina*, *Boophilus decoloratus* 6025
 winter, cold temperature, eggs, *Lymnaea dispar*, Canada, Quebec 2127
 yeasts like symbionts, antibiotics effects on, *Nilaparvata lugens* 8307
Mortality factors,
 eggs, larvae, colonies size, *Neodiplosis serifer* 1270
 larvae, population dynamics, *Spodoptera exempta* 580
Morus,
 plant extracts, phenolics, antifeedants, feeding stimuli, *Bombyx mori* 7529
Musca disease,
 disease transmission, *Ootheca mutabilis*, *Melythia quaterna*, *Vigna unguiculata*, Africa, West 547
 disease transmission, vectors, *Megalurothrips sjostedi*, *Vigna unguiculata* 546
 plant diseases, vectors, *Aphis gossypii* 7652
Mosaics,
 mutants, morphology, *Drosophila melanogaster* 1535
Mother-offspring interactions,
 eggs, maternal behavior, *Labidura riparia* 3521
 feeding, nymphs, *Pempisphera* 2746
Motility,
 cell lines, 20-hydroxyecdysone effects on, *Drosophila* 168
Motivation,
 activity patterns, rhythms, *Vaccus jacobsoni oudeanus* 9089
Motor activity,
 abdomen, peristalsis, circulation, ventilation, *Culicidae* 5661
 cardiovascular system, physiology, visual stimuli effects on, *Calliphora vomitoria* 4146
 colonial characteristics, electric fields effects on, power lines, *Apis mellifera* 7570
 flight, nerve transmission, interspike interval, *Drosophila* 7285
 muscles, neurons, electrical properties, *Paruroctonus mesacensis* 113
 muscles, neurons, electrical properties, *Paruroctonus mesacensis* 120
 nervous system effects on, *Carassius morosus* 117
 neurons lesions effects on, *Periplaneta americana* 4128
 neurophysiology, oviposition, *Acheia domestica* 4266
 visual perception, neurophysiology, flight, *Drosophila melanogaster* 6683
Motor neurons,
 metathoracic fast extensor tibiae, structure, comparison, *Acrididae*, *Gryllidae* 8909
 posture reflex tonus, role, peripheral nervous system, *Periplaneta americana* 8918
 regeneration, leg, muscles, octopamine receptors, *Periplaneta americana* 8912
 structure, muscles, leg, *Periplaneta americana* 8906
Motor vehicles,
 catching methods, nets, *Hypera meleus* 4088
Mounds,
 architecture, *Odonotermes gundupensis*, India, Haryana 7801
 colonial characteristics, fungus gardens, *Odonotermes microdentatus* 5424
 colonial characteristics, geomorphology, *Isopora* 3844
 movements, insecticides effects on, *Solenopsis* 2652
 nest building, soil properties, *Isopora*, Pakistan 9369
 pests, control programs, destruction, *Solenopsis invicta* 1460
 physical properties, comparative studies, *Macrotermes subhyalinus*, *Macrotermes nuchalei* 747
Mounting behavior,
 copulation, competition, *Lygaeus equestris* 3535
 stridulation, courtship, copulation, *Palmarctia nana* 4300
Mouth parts,
 parasites, ultrastructure, *Arrenurus* 2505
 development, nutrition, effects on, *Cyclophora* 381
 functional morphology, feeding, *Cetonia aurata* 6510
 functional morphology, *Osmia scutellus*, USA, Utah 9101
 morphology, *Copris sacculatus* 8894
 morphology, geographical variations, altitude, *Orinocarabus latreillanus*, Italy, Novara 7073
 morphology, *Hesperandra* 6505
 morphology, histology, *Oestromyia leporina* 83
 morphology, *Osmia scutellus*, USA, Utah 5880
 morphology, *Psoroptes* 6497
 penetration, host plants, *Icerya seychelliana*, Aldabra Atoll 4395
 sensilla, innervation, ultrastructure, females, *Simulium venustum* 4142
 taste perception, sense organs, ultrastructure, *Drosophila melanogaster* 133
Movements,
 abundance, crop fields, agricultural practices effects on, *Insecta* 6198
 activity patterns, larvae, grasslands, *Hemiteles olivae*, USA, New Mexico 3653
 body, mating behavior, *Apanteles glomeratus* 7487
 chromosomes, U.V. radiation effects on, spermatocytes, *Nephrotoma ferruginea* 4681
 chromosomes, spermatocytes, spectroscopy, *Nephrotoma ferruginea* 4683
 colonies, mortality, apiculture, *Apis mellifera* 6937
 diurnal variations, host plants, thermoregulation, *Dactyloctenium aegyptium* 4319
 interspecific relationships, encounters, mathematical models, *Arthropoda* 6788
 larvae, host plants, *Hippodamia convergens* 5957
 maxillary palps, feeding behavior, exploratory behavior, *Gryllus bimaculatus* 8055
 mounds, insecticides effects on, *Solenopsis* 2652
 nesting behavior, colonial characteristics, *Tapinoma sessile*, *Formica subsericea* 7044
 orientation, host plants, larvae, *Atherigona soccata* 4563
 pests, buildings, urban environments, *Blattella germanica* 8436
 recolonization, floods, *Insecta*, USA, Arizona, Sycamore Creek 5432
 sound effects on, *Heliothis armigera* 9081
 spatial distribution, aggregation behavior, sound production, males, *Neocnecophalus ensiger* 9361
 U.V. radiation effects on, *Plea leachi* 6232
 visual perception, neurons, neurophysiology, *Musca domestica* 7303
Mowing,
 crop fields, pest control, *Heliothis zea*, *Heliothis virescens*, *Gossypium* 7713
 turf, survival, *Endria unimica*, *Oniscella frit* 6132
Mozambique,
 check lists, geographical distribution, *Odonata* 7107
 population density, sampling, methodology, *Glossina morsitans* 1281

Mozambique, (continued)

resting behavior, habitat preferences, environmental factors. *Glossina* 1178.

Musca domestica lymph node syndrome, role, Dermatophilagidiosis pteronyssus antigens, man 8435.

Mud.

aggregation, *Pieris napi*, Finland 9092.

feeding, sodium requirements, sex differences, *Pieris rapae*, USA, Pennsylvania 1346.

Muellanella,

population ecology, resource partitioning, host plants, habitat, phenology 3633

reproductive isolation, song, geographical variations 8266

taxonomy, morphology, geographical distribution 7204.

Muellanella brevipennis,

intraspecific hybridization, systematics, *Muellanella extrusa*, *Muellanella fairmairei* 5487

Muellanella extrusa,

intraspecific hybridization, systematics, *Muellanella brevipennis*,

Muellanella fairmairei 5487

Muellanella fairmairei,

intraspecific hybridization, systematics, *Muellanella brevipennis*,

Muellanella extrusa 5487

Mulches,

aluminum, pest control, *Macrosetes fascifrons*, infestation, *Lactuca*, cultivars 2253.

effects on abundance, crop fields, *Empoasca kraemeri* 2246.

soil amendment, effects on abundance, *Empoasca* 1287

Multienzyme complexes,

fructose-bisphosphate aldolase + triosephosphate isomerase, purification.

characterization, flight muscle, *Ceratitis capitata* 2574.

Multiploip

new species, taxonomy, morphology, Tahiti, Fiji, Philippines 7139

Murphyanella aliquidula,

new genera, new species, morphology, Singapore 8802

Murray Valley encephalomyelitis virus,

vectors, disease transmission, *Culex pipiens quinquefasciatus* 7632.

Musa muscae,

ectoparasites, surveys, *Acarales* 513.

Musca autumnalis,

chemical control, insecticides, ear tags, cattle 6131.

chemical control, insecticides, ear tags, cattle 9257

chemical control, insecticides, systems, Bay Vi 7533, livestock 9326.

chemical control, toxicity, rose bengal, erythrosin B, developmental stages, emergence 2233.

cuticle hydrocarbons, attractants, bioassays 1780.

feeding, effects on avoidance behavior, grazing, cattle 8568.

genetic variance, population genetics 9423

larvae food sources competition effects on life history 1274.

larvae, pest control, cattle 2176.

larvae, pest control, cattle, ivermectin 2173.

mortality, predator-prey interactions, *Ravina lymeria* 1314.

pathogens, survival, digestive tract, *Moraxella bovis* 8136.

surveys, abundance, livestock pests, USA, South Carolina 3673.

Musca cassara,

new records, geographical distribution, Australia 5538.

Musca domestica,

acetylcholine, nervous system 1735.

acetylcholine receptors, proteins, characterization, purification 899

age effects on flight muscle mitochondria 322.

bioassays, toxicity, soil, soil 2656.

biochemistry, cytochrome c, metamorphosis 6555.

biological control, attractants, efficacy 743.

biological control, pathogens, *Bacillus thuringiensis* 2218.

biological control, pathogens susceptibility, *Bacillus thuringiensis israelensis* 7631.

biological control, predators food preferences, *Mariposa tigrina* 1208.

biological control, sex pheromone, chemical control, permethrin 697.

biosynthesis, sex pheromone, muscature, (Z)-9-tricosene 229.

carbohydrate composition, hemolymph, radiation effects on 1753

cattle pests, abundance, British Isles, Scotland 736

chemical control, insecticides, systems, Bay Vi 7533, livestock 9326

chemical stimuli, host searching behavior, parasitoids, *Muscidifurax raptor*,

Muscidifurax zaraptor, *Spalangia cameroni*, *Spalangia endius* 8319.

choline, nervous system 4076.

deterrents, chemosensory composition, organic compounds, sex differences 108.

deterrents, homosexuality, males, mating behavior, homosexuality, sex pheromone 224.

diets, ecdysteroids, effects on development 7463.

effects of, temperature, sex ratio, physical activity, life span 429

enzymatic activity, γ -glutamyltransferase, developmental stages, sex differences, strains, pesticide resistance 947

enzymatic activity, pesticide resistance, pesticides (organophosphorus) 3439

enzymes, glutathione transferase, characterization 5696.

enzymes, glutathione transferase, induction, pesticides, phenobarbital, toxicity 5783.

feeding deterrents, exotoxins, *Bacillus thuringiensis* 5779.

fertility, chemosterilants, population density effects on 384.

flight activity, orientation, visual perception 1155

flight muscle mitochondria, enzymatic activity, ATP pyrophosphatase 945

genetic variance, evolution, pesticide resistance, dimethoate 9422

genetics, translocations, fertility, mating types, heterozygotes, pest control 2328

growth regulators, BAY SIR 8514, effects on immature stages, sterility, adults 8237.

growth regulators, metabolites, fluorescence, cytochrome P-450, microsomes 5693

hosts, effects on parasites development, *Muscidifurax raptor*, *Spalangia drosophilae* 2116.

inhibitors effects on electron transport, respiration, enzymatic activity, mitochondria 953.

insecticides toxicity, structure-activity relationships 2661.

insecticides, tralomethrin, tralochrin, metabolism, degradation 316

insecticides, xanthene, oocytes, larvae, effects on 1041.

juvenile hormones activity, synthesis 2581.

juvenile hormones, degradation, oxidase system, microsomes 8958.

landing behavior, visual stimuli, retina 7298.

larvae, overwintering, silage 2199.

larvae, pest control, cattle 2176.

Musca domestica, (continued)

ligands, binding, microsomes, cytochrome P-450 6554.

lipid peroxidation, metabolic rate, age effects on, life span 193.

males sexual behavior, carbon dioxide effects on 430.

malpighian tubules, permeability 927.

metabolism, oxygen consumption, life span 4237.

microsomes, cytochrome P-450, binding, substrate specificity 6561.

muscles, mitochondria, enzymatic activity, ATP pyrophosphatase, energy resources 950

neurons, visual perception, visual discrimination 140.

orientation, visual evoked response, eye 135.

orientation, visual perception, tracking, mathematics 412.

ovary, follicles, morphology, oogenesis 2708.

parasites, life history, reproduction, *Aleochara moesta* 6775.

pest control, chemical control, insecticides 6894.

pest control, Germany, Fed. Rep. 632

pest control, parasites, population dynamics, *Spalangia endius* 6903.

pest control, predators, *Acridobates gunguanus*, India 7681

pesticide resistance, chemical control, chemosterilants, benzylphenol 8497.

pesticide resistance, detoxification mechanisms, permethrin, phrethroids 1056.

pesticide resistance, dimethoate, permethrin, Germany, Fed. Rep. 311.

pesticide resistance, effects on development, fecundity, strains 8197.

pesticide resistance, insecticides, enzymes activity, Malaysia 5774.

pesticide resistance, lindane, resistance mechanisms 1849.

pesticide resistance, population genetics, selection 3124.

pesticide resistance, pyrethroid, effects on membrane composition, acetylcholinesterase activity 5792.

pesticide resistance, selection, strains, pyrethroids 1055.

pesticides, profenofos, effects on biological activity 5775.

phenobarbital effects on neurepteric acid biosynthesis 3432.

phenothrin, dose-response effects 1401.

photoperiod, effects on sensitivity, insecticides, butonate, trichlorfon 7419.

photoreceptors cells, fluorescence 4133.

photoreceptors, rhodomers, ultrastructure, spatial distribution, eye 4968.

pigments, age, physiology, physical activity 321.

predators, abundance, domestic animals excretory products, *Arthropoda*, Uganda 2696.

pupae parasites, *Muscidifurax raptor*, *Pachycrepoides vindemiae*, *Spalangia cameroni*, *Spalangia endius*, *Spalangia nigroaenea*, *Spalangia drosophilae* 708.

pupae, parasites, sampling methods, *Hymenoptera* 8857.

sesoxane, effects on diflubenzuron metabolism 5773.

sex pheromone biosynthesis, integument, abdomen 8095.

sex pheromone receptors, ultrastructure 974.

strains, body size, effects on, copulation, breeding success 2747.

strains, pesticide resistance, insecticides, pesticides (organochlorine), pesticides (organophosphorus), carbamate, pyrethroids 4233.

toxicity, lindane, DDT, pesticides (organochlorine) 7414.

toxicity tests, xanthene dyes, rhodamine B, rhodamine 6G 3433.

toxicity, xanthene dye 5778.

ultrastructure, perineurium, cells, cytology, tracers, laethanum, permeability 882.

visual perception, movements, neurons, neurophysiology 7303.

visual perception, tracking, oscillations 912.

visual perception, visual stimuli, flight 907.

Musca domestica nebulosa,

reproductive systems, anatomy, development 9036.

Musca domestica vicina,

insecticides, analogues, toxicity 4230.

pesticide resistance, pesticides (organophosphorus), enzymatic activity 3428.

Musca lusoria,

infection, pathogens, development, *Parafilaria bovicola* 5725.

Musca vetustissima,

developmental stages, mortality, predators, *Arthropoda*, Australia 2880.

survival, interspecific relationships, biological control, *Onitis alexis*,

Onthophagus bnodis, *Onthophagus ferox*, Australia 1308.

trapping, population density, estimation, dispersal, sex differences, Australia 1311.

Musca xanthomela,

infection, pathogens, development, *Parafilaria bovicola* 5725.

Muscicaram,

receptors, characterization, binding, *Drosophila melanogaster* 114.

Muscicapa striata,

feeding behavior, predation, food organisms, *Inachis* 6823.

Muscidae,

pest control, insecticides, diflubenzuron 5345.

Muscidifurax raptor,

parasites, hosts effects on development, *Diptera* 2116.

Muscidifurax zaraptor,

parasitoids, host searching behavior, chemical stimuli, *Musca domestica* 8319.

pupae parasites, biological control, *Musca domestica* 708.

Muscidifurax zaraptor,

parasitoids, host searching behavior, chemical stimuli, *Musca domestica* 8319.

Muscles,

action potential, sound production (biological), *Cyclocheila australasica*,

platyleura capitata 264.

anatomy, methodology, microscopy, *Apis mellifera* 8056.

calcium uptake, sarcoplasmic reticulum, *Blaberus fuscus* 112.

development, leg, embryos, *Periplaneta americana* 8216.

development, nuclei, ultrastructure, *Bombix mori* 7281.

electrical properties, *Manduca sexta* 2518.

enzymatic activity, temperature effects, *Locusta migratoria*, *Blaberus fuscus* 2577.

fibrits, terminology, larvae, *Lepidoptera* 2521.

genitalia, anatomy, males, *Tortricinae* 8903.

glutamate uptake, *Phantherus triangulum* venom effects on, *Schistocerca gregaria* 5768.

glycosidases, characterization, *Valanga irregularis* 2565.

heart, cell membranes, ultrastructure, *Lithobius forficatus* 6541.

kinetics, malate dehydrogenase (oxaloacetate-decarboxylating), *Catharus* 5689

leg, feedback control, *Carassius morosus* 889.

leg, feedback control, electrophysiological recording, *Carassius morosus* 890.

leg, motor neurons, regeneration, octopamine receptors, *Periplaneta americana* 8912.

leg, resting tension, posture, *Periplaneta americana* 7286.

leg, ultrastructure, *Paruroctonus mesensis* 119.

locomotion, neurophysiology, morphology, *Periplaneta americana* 4958.

Muscles, (continued)

- mechanical properties, Araneae 4123.
 membrane potential, calcium currents, potassium currents, *Carausius morosus* 8904.
 midgut, anatomy, histology, *Bombyx mori* 2550.
 mitochondria, enzymatic activity, ATP pyrophosphatase, energy resources, *Musca domestica* 950.
 motor activity, neurons, electrical properties, *Paruroctonus mesaensis* 113.
 motor activity, neurons, electrical properties, *Paruroctonus mesaensis* 120.
 motor neurons structure, leg, *Periplaneta americana* 8906.
 nervous system, embryogenesis, *Periplaneta americana* 5812.
 neurons, axons, regeneration, *Teleogryllus oceanicus* 2530.
 neurons, development, comparative studies, instars, adults, *Locusta migratoria* 3277.
 physiology, ion exchange, calcium, *Locusta* 4122.
 pupae, growth, enzymatic activity, *Calliphoridae* 2718.
 thorax, cell lines, development, origin, *Drosophila* 5814.
 thorax, morphology, larvae, *Manduca sexta* 8064.
 ultrastructure, *Locusta* 6523.
- Muscles membranes,**
 cell membranes, glutamic acid channels, *Locusta migratoria* 1731.
- Mutagens,**
 collections, *Lepidoptera* 7129.
 collections, types, *Lepidoptera* 7921.
- Mushrooms,**
 cultivation, pests, population growth, composts, *Lycoriella mali* 6172.
- Mutela,**
 disease reservoirs, rabies virus, virulence, *Phloeoxoides rugicollis* 7633.
- Mutella erinacea,**
 infestation, habitat, Siphonaptera, New Zealand 8332.
- Mutellidae,**
 parasites, surveys, Siphonaptera, Switzerland 5194.
- Muscone,**
 hypersensitivity, chromosome 3, mutants, *Drosophila melanogaster* 3097.
- Mutagenesis,**
 diploxy butane, sensitivity, *Drosophila melanogaster* 7040.
 endotoxins, *Bacillus thuringiensis*, *Insecta* 7369.
 genes, fertility, males, Spermatogenesis, *Drosophila melanogaster* 763.
 hybrids, alleles, *Drosophila* 3103.
 myxoviruses, gene expression, X chromosome, *Drosophila melanogaster* 5471.
 radiation resistance, genetic factors, *Drosophila melanogaster* 7042.
 Spermatogenesis, males, *Drosophila melanogaster* 763.
 synergism, mutagens, *Drosophila melanogaster* 7043.
- Mutagenicity,**
 ethylmethanesulfonate, radioresistance mutants, *Drosophila melanogaster* 8650.
- Mutagenicity testing,**
 aneuploidy patterns, *Drosophila melanogaster* 1526.
 ethanol, enzymes, *Drosophila melanogaster* 1525.
 herbicides, fungicides, insecticides, *Drosophila melanogaster* 4684.
 larvae, *Drosophila* 7041.
 lethality, flavonols, *Drosophila melanogaster* 5475.
 pesticides, nifurimol, *Drosophila melanogaster* 5476.
 toximal MP-8, spermatozoa, *Drosophila melanogaster* 300.
- Mutagens,**
 sensitivity, *Drosophila* 7039.
 synergism, mutagenesis, *Drosophila melanogaster* 7043.
- Mutants,**
 antennae morphology, neurons, *Drosophila* 142.
 avoidance learning, *Drosophila melanogaster* 427.
 bald antenna, sex linkage, recessive, chromosomes, *Anopheles albimanus* 5458.
 Y chromosome nucleolus organizer region, analysis rRNA genes, *Drosophila melanogaster* 5456.
 Y chromosome, spermatogenesis, protein composition, *Drosophila hydei* 2333.
 chromosome 3, hypersensitivity, methylmethanesulfonate, *Drosophila melanogaster* 3097.
 circadian rhythms, salivary gland cells fluorescence, *Drosophila melanogaster* 4982.
 coloration, larvae, *Lymantria dispar*, Japan, Honshu 7047.
 competition, wild type, fitness, *Pectinophora gossypiella* 8364.
 compound eyes, locomotor activity, circadian rhythms, *Drosophila melanogaster* 3304.
 DNA repair, oocytes, radiation damage, chromosomes, spermatozoa, *Drosophila melanogaster* 6261.
 embryo cells, thorax ganglia, central nervous system, *Drosophila* 8648.
 enzymatic activity, *Drosophila melanogaster* 1529.
 eye color, courtship, mating behavior, heterozygosity, *Drosophila melanogaster* 6276.
 eye color, mating behavior, *Drosophila melanogaster* 1135.
 eye color, morphology, genetic factors, *Plodia interpunctella*, *Ephestia elutella* 1905.
 eye fluorescence, genetic analysis, *Ceratitis capitata* 1532.
 eye pigmentation, phototaxis, *Drosophila melanogaster* 3096.
 eyes color, heritability, *Culex pipiens fatigans* 4685.
 fluorouracil, 5-bromodeoxyuridine inhibition, gene expression, *Drosophila* 1528.
 gene conversion, crossing-over, *Drosophila melanogaster* 9384.
 gene expression, development, *Drosophila* 8642.
 gene expression, heat shock proteins, loci, 87A7 locus, 87C1 locus, *Drosophila melanogaster* 8645.
 gene mapping, deletion, *Drosophila melanogaster* 9400.
 genes, recombination, *Drosophila melanogaster* 7854.
 genetic analysis, *Anopheles stephensi* 7850.
 genetic analysis, linkage, morphology, *Aedes togoi* 7851.
 genetic control, morphogenesis, *Drosophila melanogaster* 9416.
 genetics, cuticle polarity, *Drosophila melanogaster* 6271.
 genotypes, coloration, *Bombyx mori* 9417.
 intersexes, histology, reproductive organs, genitalia, *Drosophila melanogaster* 5064.
 kynurenine 3-hydroxylase, activity, mitochondria, malpighian tubules, *Ephestia kuehniella* 6566.
 lethality, purines metabolism, *Drosophila melanogaster* 3095.
 lethality, sex chromosomes, *Drosophila melanogaster* 5473.
 linkage, chromosomes, *Aedes albopictus* 769.
 loci, excision, DNA repair, *Drosophila melanogaster* 5444.
 longevity, genetic factors, *Drosophila* 5057.
 mitochondria, calcium regulation, *Drosophila* 8646.
 mosaics, morphology, *Drosophila melanogaster* 1535.
 neurons, thorax sensilla, anatomy, *Drosophila* 4962.

Mutants, (continued)

- new records, *Culex pipiens fatigans*, India, Aligarh 3904.
 pathogens, enzymes, cell surface, virulence, *Pseudomonas aeruginosa*, *Galleria mellonella* 4198.
 phototaxis, visual stimuli, courtship, *Drosophila melanogaster* 4689.
 pigmentation, photoreceptors, phototaxis, *Drosophila* 2539.
 sex linkage, gene mapping, *Drosophila melanogaster* 5472.
 pleiotropes, paralog, gene mapping, *Drosophila melanogaster* 8650.
 radioresistance, ethylmethanesulfonate mutagenicity, *Drosophila melanogaster* 8650.
 RNA polymerase II, α -amanitin binding, thermal stability, kinetics, association RPII-C4 locus, *Drosophila melanogaster* 7045.
 rRNA biosynthesis, *Drosophila melanogaster* 1538.
 sex determination, vitellogenesis, gonads, morphology 6268.
 sex linkage, gene mapping, *Culex pipiens fatigans* 7046.
 sex linkage, genetic analysis, morphology, leg, *Aedes togoi* 7852.
 sex linkage, recessive, maroon-eye, *Aedes albopictus* 6270.
 sex pheromone, courtship inhibition, *Drosophila melanogaster* 972.
 sexual behavior, courtship, *Drosophila* 4286.
 sterility, characterization, RNA biosynthesis, ovary, *Drosophila melanogaster* 1530.
 toxicity tests, *Asseclides*, *Tribolium castaneum* 7397.
 tumorigenesis, sterility, *Drosophila melanogaster* 3093.
 ultrastructure, cytochemistry, tumor cells, hemopoietic system, hemolymph, *Drosophila melanogaster* 6516.
 virulence, *Pseudomonas aeruginosa*, *Galleria mellonella* 5738.
- Mutation,**
 alleles, *Drosophila* 3103.
 alleles, lethality, loci, mus-105, mus-109, *Drosophila melanogaster* 8644.
 alleles, trithorax loci, *Drosophila melanogaster* 8643.
 associative learning, habituation, sensitivity, *Drosophila* 8647.
 X chromosome, gene mapping, *Drosophila melanogaster* 1505.
 X chromosome, markers, recombination frequency, *Drosophila melanogaster* 3104.
 chromosomes, stability, replication, *Drosophila melanogaster* 7037.
 development duration, *Bombyx mori* 7856.
 DNA isolation, methodology, *Drosophila melanogaster* 1509.
 duplication, genetic analysis, *Drosophila* 9414.
 duplication patterns, thorax, imaginal discs, *Drosophila melanogaster* 767.
 esc gene, gene expression, determination, segments, *Drosophila* 6253.
 eye color, *Apis mellifera* 1524.
 eye color, Y chromosome translocations, genetic control failure, *Lucilia cuprina* 2348.
 flight muscle, electrochemistry, potassium, *Drosophila* 5660.
 genes, X chromosome, heterozygosity, enzymatic activity, *Drosophila virilis* 1531.
 genetics, leg, morphology, *Drosophila* 766.
 germ cells, sex determination, interference, *Drosophila* 3906.
 heritability, mutants, *Culex pipiens fatigans*, India, Aligarh 3904.
 homeosis, wings, heterozygotes, homozygotes, *Drosophila melanogaster* 3901.
 lethality, genes, X radiation sensitivity, *Drosophila melanogaster* 7044.
 lethality, instability, alleles, X chromosome, *Drosophila melanogaster* 3107.
 magnetic fields effects on, continuous culture, *Hesperocremna* 7493.
 maternal effects, embryogenesis, *Drosophila* 764.
 morphogenesis, imaginal discs, patterns formation, *Drosophila* 762.
 neutron radiation, X radiation, *Drosophila melanogaster* 7038.
 patterns duplication, mitosis recombination, compartmentation, *Drosophila* 1522.
 pigmentation, eye, inheritance, *Tryphaena* mercator 5470.
 recessive, effects on enzymes, mitochondria respiration, *Drosophila melanogaster* 5470.
 sex chromosomes, 7,12-dimethylbenz(a)anthracene, *Drosophila melanogaster* 2332.
 stings, *Apis mellifera* 768.
 suppressors, chromosomes, oocytes, spermatocytes, *Drosophila ananassae* 3098.
 toximal MP-8 mutagenicity testing, spermatozoa, *Drosophila melanogaster* 300.
 tryptophan metabolism, neurons, *Drosophila melanogaster* 1534.
 Ultrabithorax mutations, gene expression, thorax, abdomen, *Drosophila* 6272.
 winglessness, development, *Tribolium castaneum* 1108.
 wings, mutants, developmental genetics, genetics, *Drosophila* 1523.
 X radiation, sex linkage, *Drosophila melanogaster* 6267.
 X radiation, spermatogenesis, *Drosophila melanogaster* 3100.
- Mutillidae,**
 surveys, species composition, historical account, Africa 3949.
- Mutualism,**
 abundance effects on survival, *Formica subsericea*, *Vanduzeeia arquata* 6749.
 Cecropia monochrysa, Formicidae, Ecuador 5208.
 colonies, nesting behavior, *Melipona flavipes*, *Melipona fasciata* 6985.
 gut microflora, aerobes, bacteria, *Orthoporus ornatus*, *Comanichus* 8308.
 host plants, pollination, foraging behavior, *Asclepias syriaca*, *Bombus* 2050.
 host plants, *Publilia concava*, *Soldado altissimus* 2073.
 interspecific relationships, *Dendrolaelaps neoseius*, *Dendroctonus frontalis* 500.
 interspecific relationships, *Trigona hyalinata*, *Acanophora flavipes* 6750.
 myrmecophily, plant communities guilds, USA, West Virginia 2837.
 plant communities, food sources, tropical environment, formicidae 4399.
- Myaptes acutus,**
 new species, taxonomy, morphology, Chile 7178.
- Myella,**
 growth, composts, pests population growth, mushrooms cultivation, *Lycoriella mali* 6172.
- Myecetina sanjii,**
 new species, taxonomy, morphology, Taiwan 7169.
- Myecetina maderi,**
 new species, taxonomy, morphology, China, People's Rep. 7169.
- Mycetobia divergens,**
 new records, geographical distribution, Canada, British Columbia 5526.
- Mycetome,**
 symbionts, antibiotics effects on, diets, *Rhizopertha dominica* 7535.
 symbionts, factors affecting abundance, *Glossina* 5173.
- Mycetophilidae,**
 community composition, ecological distribution, host plants, *Leccinum scabrum* 4439.
 larvae, association, fruit bodies, fungi 538.
- Mycetophiloidae,**
 taxonomy, morphology, fossils, France 1623.
- Mycetoporus santicensis,**
 new records, geographical distribution, Switzerland 7099.
- Mycoecoporus goeldii,**
 mandibular glands secretions, α -aminoacetophenone, phylogeny 2608.

- Mycomya goethalsi**,
new species, morphology, taxonomy, Panama 1625.
new species, taxonomy, morphology, Panama, Barro Colorado 4833
- Mycomyiini**,
taxonomy, geographical distribution 5569
- Mycoplasma**,
vectors, Ollarianus bahi, Jamaica 5892.
- Mycoptes musculus**,
ectoparasites, Mus musculus, 513.
- Mycothia**,
association, Tetraneura, Imperata cylindrica, India 7802.
- Mycoxis**,
chemical control, fungicides, Beauveria, Bombyx mori 6154
- Mycotoxins**,
biological control, pests, bioaccumulation, aflatoxins, Aspergillus flavus, Zea mays, Ostrinia nubilalis 4625
diets protein composition, effects on growth, Tenebrio molitor 1113.
effects on, viability, development, body length, Drosophila melanogaster 4212.
interspecific relationship, Aspergillus flavus, Penicillium oxalicum, Fusarium moniliforme, Zea mays, Ostrinia nubilalis 6899.
toxicity, paralysis, Entomophaga egressa, Choristoneura fumiferana 5798
- Myiodactylus**,
new species, taxonomy, morphology, Australia 3227.
- Myiabris pustulata**,
aggregation, spatial distribution 4418.
mupighian tubules, morphology, histology 929.
- Myllaena**,
new species, systematics, phylogeny, zoogeography, Nearctic Region 4742
- Myllaenini**,
taxonomic revision, morphology 4111
- Mytilocerus discolor**,
antifeedants, leaves, Corchorus capsularis 5207
plant extracts, antifeedants, Corchorus capsularis 2851
- Mytilocerus maculosus**,
host plants, pest resistance, genotypes, Eleusine coracana 5408
Mytilocerus muscibaculatus maculosus, life history, diets, host plants 5151.
- Myndus cradus**,
compound eyes, migrations, pigments, light effects 3297.
- Myobia musculi**,
ectoparasites, Mus musculus 513.
- Myobulade**,
parasites, species composition, Sorex cinereus, Sorex longirostris 9149.
- Myobulidae**,
parasites, hosts taxonomy indicators, Chiroptera 5950
- Myodopylella gentilia**,
new records, parasites, Mammalia, USA, Alaska 5530.
- Myogryllus**,
spermatids, histology, cyst cells, spermatogenesis 5065
- Myosia**,
protein composition, flight muscle, Drosophila melanogaster 1770.
- Myotis capaccini**,
parasites, new species, Acanthophthirus capaccini, Turkey 5545.
- Myotis lucifugus**,
new records, parasites, Spinturnix globosus, Canada, Alberta 5192.
- Myriapoda**,
gut microflora, fungi 8306
- Myrica gale**,
food plants, association, development, Bucculatrix cidarella 9159.
- Myriophyllum spicatum**,
association, Arthropoda, host-parasite interactions, Paraponyx badialis 527.
- Myrmecophodius excavatocollis**,
interspecific relationships, association, Solenopsis 9218.
- Myrmecossus**,
taxonomic revision, morphology, keys 5558.
- Myrmecossusina**,
taxonomic revision, morphology, keys 5558.
- Myrmecia gulosa**,
compound eyes, receptors, Australia 137.
- Myrmecocystus depilis**,
competition, foraging behavior, niche overlap, Iridomyrmex pruinosus 4999
- Myrmecocystus mexicanus**,
abdomen cuticles, resiliin, chemical composition 110.
- Myrmecocystus mimicus**,
competition, foraging behavior, niche overlap, Iridomyrmex pruinosus 5999
foraging behavior, social behavior, territory, spatial variations, temporal variations 1999.
- Myrmecophilidae**,
eggs, clustering, association, Lycaenidae 1193.
- Myrmecophily**,
plant communities, guilds, Formicidae, USA, West Virginia 2837.
- Myrmecobia samia**,
new records, geographical distribution, Nearctic Region 3151.
- Myrmecoleon**,
flight, wings, aerodynamic properties 6522.
larvae, keys, morphology, USA, Florida 1709.
predation, anti-predator behavior, defensive behavior, Formicidae 6836
- Myrmecoleon formicarius**,
life cycle, seasonal variations, Japan 4339.
- Myrmecoleon immutabilis**,
burrowing behavior, pits construction, soil temperature, light intensity 6223.
pits construction, predation, light intensity, soil moisture, larvae 5126.
- Myrmecoleon immaculatus**,
larvae, morphology, USA, Florida 1709.
- Myrmecoleon insertus**,
new records, morphology, USA, Florida 1709.
- Myrmica**,
colonial characteristics, factors affecting males abundance 2273.
colonial characteristics, population growth, mathematical models 3049
colonial characteristics, sex ratio, queens effects on 2279.
- Myrmica litmanica jacobsoni**,
population dynamics, stability, colonies, mathematical models 8380.
- Myrmica rubra**,
coastal environment, dunes, environmental effects, brackish water, survival 4455
colonial characteristics, males production 2277.
mandibular glands, pheromones, olfactory communication 5867
- Myrmica rubra**, (continued)
population genetics, relatedness, queens, polygyny 6280.
queens, effects on aggregation behavior, chemical stimuli 2267.
trail pheromone, biochemical analysis 973.
trail pheromone, 3-ethyl-2,5-dimethylpyrazine, venom gland 6576.
trophallaxis, communication, antennae, information theory 5870.
workers, population levels, marking methodology, europium 6981.
- Myrmica ruginodis**,
colonies, reproduction, polygyny, monogyny, Japan, Sapporo 3843.
mandibular glands, pheromones, olfactory communication 5867.
- Myrmica rugulosa**,
feeding behavior, workers recruitment, trail pheromone 4348.
foraging behavior, workers recruitment, pheromones 5169.
mandibular glands, pheromones, biochemical analysis, olfactory communication 5867.
- Myrmica sabuleti**,
colonies, nest building (non-reproductive), vegetation, British Isles, England 8588.
mandibular glands, pheromones, olfactory communication 5867.
population studies, colonies, grasslands, British Isles, England 8587.
- Myrmica scabrinodis**,
coastal environment, dunes, environmental effects, brackish water, survival 4455.
colonies, nest building (non-reproductive), vegetation, British Isles, England 8588.
mandibular glands, pheromones, olfactory communication 5867.
population dynamics, colonies, British Isles, England 6218.
population studies, colonies, grasslands, British Isles, England 8587.
workers, population levels, marking methodology, europium 6981.
- Myrmica schencki**,
mandibular glands, pheromones, olfactory communication 5867.
- Myrmica schencki starki**,
new species, taxonomy, morphology, Mongolia, People's Rep. 8678.
- Myrmica sabuleti**,
population dynamics, colonies, British Isles, England 6218.
- Myrmicidae**,
surveys, species composition, Mongolia, People's Rep. 8678.
- Myrmicinae**,
taxonomy revision, Ethiopian Region 1651.
- Myrmotherula fulviventris**,
predators, effects on community composition, forests, Arthropoda 4467.
- Myraidea rustica**,
parasites, morphology, Spain 8046.
- Myrmica jobi**,
new records, geographical distribution, Czechoslovakia 8737.
- Mythimna separata**,
effects on yield, damage, Zea mays 2255.
pest outbreaks, crop fields, damage, Secale cereae, India 6925.
pest outbreaks, factors affecting population decline, parasites, viruses, India 5301.
pests, defoliation, effects on yield, Zea mays 6941.
pests, migrations, locomotor activity, infestation, environmental conditions 1170.
Viruses, nuclear polyhedrosis virus, effects on, Philosamia ricine, larvae, pathology 1813.
- Myxomatosis**,
vectors, pest control, Stilpnotylus cuculi, Oryctolagus cuniculus, Australia, New South Wales, Urua 7627
- Myzra persicae**,
avoidance behavior, host plants, alarm pheromone, pest control 7337.
behavior, colonization, light effects, crop protection barriers 1172.
cold tolerance, overwintering, strains 5893.
coloration, inheritance, genetic factors 5478.
development, fecundity, host plants, winter, India, Simla 7746.
diets, potato virus Y, tobacco mosaic virus, adsorption 3416.
disease transmission, bean yellow mosaic virus, Vicia faba host plants 3707.
disease transmission, beet western yellows virus, strains, USA, Washington 6139.
disease transmission efficiency, potato leaf roll virus 3395.
disease transmission, lettuce virus, localization, salivary gland 8148.
disease transmission, plant diseases, viruses, Lycopersicon esculentum 7654.
disease transmission, plum pox virus, disease resistance, host plants, Prunus persica 1259.
disease transmission, potato spindle tuber viroid 3704.
disease transmission, role, helper factor, watermelon mosaic virus, turnip mosaic virus 3706.
disease transmission, vectors, cucumber mosaic virus, Israel 7657.
(E)- β -farnesene, carboxylic acids, effects on host searching behavior, landing behavior 7343.
feeding behavior, potato virus Y transmission, temperature effects on 7699.
food organisms, nutritive value, effects on growth, reproduction, Aphidletes aphidimyza 5678.
growth rate, host plants, predators effects on 2071.
host plants infection effects on pest resistance, turnip mosaic virus, Brassica rapa 3830.
host plants, weeds, beet yellows virus vectors, USA, Washington 6175.
host preferences, food plants, Leguminosae 6945.
host searching behavior, flight activity 1978.
occurrence, population dynamics, sampling methods, crop fields, USA, California 9349.
pest control, chemosterilants 4575.
pest control, effects on crop yield, Brassica napus 3039.
pest control, effects on crop yield, Cucurbita pepo 4567.
pesticide resistance, deltamethrin, enzymatic activity 2657.
pests, biological control, natural enemies, host plants effects on 723.
pests, chemical control, ethyl formate 2939.
pests, feeding damage, Solanum tuberosum 8543.
pests, natural enemies, predators, crops, Beta vulgaris, New Zealand 8492.
pests, natural enemies, surveys, India 6926.
pests, spatial distribution, host plants, sampling, Brevicoryne brassicae, USA, California, Orange Co. 8358.
plum pox virus vectors, flight activity, orchards 3835.
population density, predator-prey interactions, temperature effects on, Coleomegilla maculata 6022.
population dynamics, pests, Solanum tuberosum, Egypt 6958.
population dynamics, seasonal variations, spatial distribution, crop fields, Brassica oleracea, USA, California 4608.
population dynamics, temperature effects 1275

- Myzus persicae**, (continued)
 predator-prey interactions, colonization, effects on weeds 533.
 predator-prey interactions, effects on population levels, dispersal, Carabidae,
 British Isles 8391.
 sampling, natural enemies, *Coleomegilla maculata* 584.
 seasonal variations, population levels, host plants abundance, USA, Washington
 598.
 sexual reproduction, pest resistance, cultivars, *Solanum* 4633.
 susceptibility, insecticides, ^{14}C -phorate, diets 2658.
 taxonomy, cytology, chromosomes 7846.
 toxicity, insecticides, pirimicarb, carbaryl, methamidophos 318.
 vectors, maize dwarf mosaic virus transmission 3806.
 vectors, yellow, *Beta vulgaris*, Tasmania 6097.
 vertical distribution, predation, simulation models, *Myzus persicae* 1234.
 viruses disease transmission, deltamethrin effects on, host plants 6954.
 viruses disease transmission, host plants, repellents effects on 6979.
- Myzus varians**,
 disease transmission, plum pox virus, disease resistance, host plants, *Prunus*
 persica 1259.
 polymorphism, morphology, India 6513.
- N.M.R.**,
 hemolymph chemical composition, larvae, pupae, *Manduca sexta* 2576.
- N,N'-Hexamethylenedibis**,
 topical application, chemosterilization, *Scolytus multistriatus* 8234.
- Nabla**,
 abundance, Glycine max crop fields 2164.
 eggs, parasites, distribution, host plants 8384.
 food preferences 1197.
 nontarget organisms, insecticides toxicity 8172.
 nontarget organisms, toxicity, chloridine form 4227.
 oviposition, eggs, abundance, crop fields, Glycine max 5322.
- Nabis alternatus**,
 predation, food organisms, *Phyllotreta cruciferae* 8368.
 predators, effects on growth rate, *Myzus persicae* 2071.
 toxicity, methyl parathion, toxaphene 1830.
- Nabis americoferus**,
 abundance, movements, agricultural practices effects on, crop fields 6198.
 feeding behavior, predator-prey interactions, *Spodoptera exigua*, *Lygus hesperus*
 5927.
 oviposition, site selection, host plants 9069.
 toxicity, methyl parathion, toxaphene 1830.
- Nabis roeselensis**,
 oviposition, site selection, host plants 9069.
- Nabis tamsanicus**,
 predation, *Heliothia punctiger* larvae, nuclear polyhedrosis virus transmission
 1029.
- NAD(PH)-cytochrome reductase**,
 antibodies, cross-reactivity, *Spodoptera eridania*, Insecta 1768.
 role, digestive tract, *Spodoptera eridania* 1758.
- Nairobi sheep disease virus**,
 vectors, disease transmission, *Rhipicephalus appendiculatus* 4511.
- Naja mossambica mossambica**,
 venom, toxicity, enzymatic activity effects on, *Arthropoda* 1057.
- Naja naja atra**,
 cobra venom factor, effects on immunity, *Galleria mellonella* 1071.
- Najas**,
 aquatic weeds, biological control, host specificity, *Parapogon rugosus*, USA
 2204.
- Nala nepalensis**,
 larvae, evolution 9407.
- Nalopididae**,
 new records, geographical distribution, India 7141.
- Nallachius**,
 taxonomy, morphology, new species, Brazil, Amazon Basin 4055.
- Namibia**,
 new species, taxonomy, morphology, *Parvidens arida* 4843.
- Namibia, Namib Desert**,
 food organisms, *Trinervitermes*, *Proteles cristatus* 9193.
 species composition, association, Insecta, Arachnida, *Zygophyllum simplex* 9160.
- Namibia, Namib Desert, Gobabeb**,
 dunes, synecology, community composition, *Coleoptera* 9205.
- Nananthrips**,
 synonymy, *Sophothrips* 5610.
- Nannobittacus elegans**,
 morphology, eggs, larvae 6490.
- Nanorchestes antarcticus**,
 cold hardiness, acclimation, starvation, Antarctica, Signy I. 6579.
 new species, abundance, geographical distribution, sympatry, Antarctica, Victoria
 Land 4703.
 new species, taxonomy, geographical distribution, Antarctica, Victoria Land 4722.
- Nanorchestes bellus**,
 new species, abundance, geographical distribution, sympatry, Antarctica, Victoria
 Land 4703.
 new species, taxonomy, geographical distribution, Antarctica, Victoria Land 8722.
- Nanorchestes brekeriellae**,
 geographical distribution, Antarctica, Victoria Land 8722.
- Nanorchestes brekeriellae**,
 new species, abundance, geographical distribution, sympatry, Antarctica, Victoria
 Land 4703.
- Nanorchestes collinus**,
 new species, taxonomy, morphology, Arctic 3963.
 taxonomy, morphology, Arctic 8721.
- Nanorchestes gilli**,
 new species, taxonomy, morphology, Arctic 3963.
 new species, taxonomy, morphology, Arctic 8721.
- Nanorchestes jodae**,
 new species, taxonomy, morphology, Arctic 3963.
 new species, taxonomy, morphology, Arctic 8721.
- Nanorchestes laiae**,
 new species, abundance, geographical distribution, sympatry, Antarctica, Victoria
 Land 4703.
 new species, taxonomy, geographical distribution, Antarctica, Victoria Land 8722.
- Nanorchestes lillioi**,
 new species, taxonomy, morphology, Arctic 3963.
 new species, taxonomy, morphology, Arctic 8721.
- Nanorchestes wilbanksi**,
 new species, taxonomy, morphology, Antarctica, Marie Byrd Land 7148.
- Nanorthrips**,
 synonymy, *Sophothrips* 5610.
- Naphelius**,
 taxonomy, morphology, new records, India 7194.
- Naphelius latus**,
 taxonomy, morphology, new records, India 7194.
- Napodytes**,
 new genera, taxonomy, morphology, Ecuador 6355.
- Napodytes bolli**,
 new species, taxonomy, morphology, Ecuador 6355.
- Narckissine**,
 effects on RNA biosynthesis, salivary gland, *Chironomus thummi* 3882.
- Nasal infection**,
 parasites, *Cephenomyia*, *Odocoileus hemionus* 518.
- Nasutitermes borneensis**,
 new species, new genera, parasites 11.
- Nasutitermitinae**,
 defense secretions, biochemical analysis 3379.
- Nasutitermes**,
 defense secretions chemical composition, phylogeny 1566.
 pathology, infection, parasites, *Mastotermes crassus*, Panama 4199.
- Nasutitermes acanthopus**,
 new species, taxonomy, morphology, Brazil 8834.
- Nasutitermes aquilinus**,
 morphology, biometry, castes, immatures, Brazil 8869.
- Nasutitermes columbianus**,
 pathology, infection, parasites, *Mastotermes crassus*, Panama 4199.
- Nasutitermes corniger**,
 colonial characteristics, castes reproduction, ergatoids 6998.
 colonial characteristics, reproductive strategy, Panama 3845.
 colonies, parasites, effects on survival, reproduction, *Mastotermes crassus*
 4193.
 nests, design comparison, *Nasutitermes ephrae*, Costa Rica, Panama 1958.
 pathology, infection, parasites, *Mastotermes crassus*, Panama 4199.
 pests, infestation, *Manihot esculenta* crop fields, Brazil, Para State 4597.
 pheromones, polythetic behavior, foraging behavior, recruitment, defensive
 behavior 6685.
- Nasutitermes duncensis**,
 colonies, brood care, population density, seasonal variations, India 5418.
 lipid composition, castes 7716.
- Nasutitermes ephrae**,
 colonies, parasites, effects on survival, reproduction, *Mastotermes crassus*
 4193.
 nests, design comparison, *Nasutitermes corniger*, Costa Rica, Panama 1958.
 pathology, infection, parasites, *Mastotermes crassus*, Panama 4199.
- Nasutitermes exilis**,
 biological control, pathogenicity, mortality, *Metarhizium anisopliae* 8165.
 gut microflora, alterations, effects on, nitrogen metabolism 233.
 pest resistance, *Eucalyptus* wood 4527.
- Nasutitermes octopilis**,
 biosynthesis, defense secretions 253.
- Nasutitermitis**,
 chemical composition, defense secretions, Papua New Guinea 255.
 defense secretions chemical composition, phylogeny 1566.
- Natural disturbance**,
 effects on distribution, seasonal variations, algal blooms, population changes.
 Diptera, coastal environment 8602.
- Natural enemies**,
 abundance, seasonal variations, *Athena soccata*, Nigeria 4560.
 biological control, competition, *Homoptera*, *Lepidoptera*, *Coleoptera* 6095.
 biological control, pests, *Pectinophora gossypiella*, USA, Arizona 1463.
 biological control, pests, *Tetranychus urticae*, *Phytoseiulus persimilis*,
Amblyseius potentillae, *Amblyseius hibens*, *Metaseiulus occidentalis* 8709.
 biological control, *Phenacoccus manihoti*, Africa 1194.
 distribution, crop fields, *Rhopalosiphum maidis*, Zea mays 7728.
 effects on population dynamics, *Sitobion avenae*, *Metopolophium dirhodum*, British
 Isles 8394.
 effects on population levels, *Cydia pomonella*, British Isles 8397.
Exorista japonica, *Hyphantria cunea* 610.
 host plants effects on, biological control, *Myzus persicae* 723.
 mortality, insecticides effects on, *Tetranychus urticae* 2893.
 nontarget organisms, toxicity, pesticide residues, *Planococcus citri* 5800.
 parasites, *Hymenoptera*, *Scolytidae*, Israel 4372.
 parasites, pests, *Malacosoma indica*, India 6768.
 parasites, predators, biological control, *Pseudococcus comstocki*, USA, California
 3018.
 parasites, predators, *Fulgoroidea* 9137.
 parasites, predators, *Neochlamis bebbii*, *Neochlamis eichhorniae*, Argentina 8379.
 parasites, predators, seasonal variations, *Pseudaulacaspis pentagona*, Japan 2141.
 pathogens, *Zoopthora* infection, dead larvae, measuring techniques, *Hypera*
 postica 8010.
 pest control, *Aphytis*, *Quadraspidothrips perniciosus*, Greece 2956.
 pest control, biological control, *Rhopalosiphum maidis* 6171.
 pest control, biological control, *Spodoptera frugiperda*, USA, California 4626.
 pest control, ornamental plants, *Pulvinaria mesembryanthi*, *Pulvinaria*
deltoidea, USA, California 9316.
 pest control, *Persea* plantations, *Pseudococcus longispinus* 2945.
 pest control, predators surveys, *Nezara viridula* 607.
 pests, abundance, ornamental plants, *Lepidosaphes tapleyi*, Egypt 6955.
 pests, insecticides, toxicity, selectivity, reviews, Insecta 7408.
 pests, parasites, *Chaenusa*, *Hydrellia philippina*, India 7673.
 pests, population dynamics, Insecta, conferences 8672.
 pests, *Pseudaulacaspis pentagona* 6089.
 pests, surveys, *Aphis craccivora*, *Lipaphis erysimi*, India 6943.
 pests, surveys, *Myzus persicae*, *Spodoptera litura*, India 6926.
 predation, effects on population levels, *Sitobion avenae*, *Metopolophium dirhodum*,
Metopolophium festucae, British Isles 8389.
 predators, pests, crops, *Burkholderia glaberrima* solani, *Myzus persicae*, New
 Zealand 8492.
Procecidochares utilis, *Bracon*, *Eurytoma*, India 3615.
 sex ratio, population dynamics, predation, Insecta 8386.

- Natural enemies, (continued)**
weed control, Heliconiidae, *Passiflora mollissima*, USA, Hawaii 2947.
- Natural selection,**
communication, Scolytidae 4699
evolution, predation, sexual reproduction, males, Insecta 4698
genetic variance, alcohol dehydrogenase, biochemical characteristics, *Drosophila melanogaster* 3910
genetics, variation, isochromosomes, enzymatic activity, *Drosophila melanogaster* 2337
mating behavior, mate selection, Lepidoptera 4285
mating behavior, *Pteroptryx*, Afrocimex, *Xylocoris* 1152
parasitoids effects on hosts behavior 6752
pupation, site location, *Papilio glaucus*, *Battus philenor* 6293
- Nature reserves,**
wildlife conservation, institutions, Invertebrata, British Isles 2126.
- Nauphoeta cinerea,**
dominance, social hierarchies, olfactory stimuli role 8596
fat metabolism, water balance, body weight, molting 7324
ovoviviparity, embryogenesis, molting, juvenile hormones, morphology 3514.
- Navigation behavior,**
foraging behavior, orientation, *Apis mellifera* 5865
migration, role, light polarization, *Conixidae* 2857
orientation, light, polarization *Apis mellifera* 8263
- N,N-Diethyl-3-methylbenzamide,**
stored products pests repellents, repellency, Insecta 711.
- Nealioilus curculionis,**
parasites, infestation, *Rhynocylus concus*, USA, Virginia 5937
- Neannatus grallarius,**
surveys, *Orseolia oryzae*, China, People's Rep 1013
- Neannatus oryzae,**
surveys, *Orseolia oryzae*, China, People's Rep 1013
- Nearctic Region,**
morphology, taxonomy, *Hydroperla* 1673
- Nearctic Region,**
new genera, taxonomic revision, *Brillia* par. *Xylotopus* 3994
new records, geographical distribution, *Myrmecodoba exilis* 3151
new species, systematics, phylogeny, zoogeography, *Mytilina* 4742
reclassification, genera, new species, *Cyrtinae* 7945
taxonomic revision, new species, *Oreothalia spinatris*, *Oreothalia sierrensis*, *Oreothalia chilensis* 2426
taxonomy, morphology, *Amblyseius umbracrus* 8723
taxonomy, reviews, *Cyrtopoda* 8812
taxonomy, synonymy, *Bruchidae* 3162
- Neastercoris spangleri,**
new species, taxonomy, morphology, Ecuador 6415
- Nebria defreilasi,**
new species, taxonomy, morphology, Asia 3984
- Necrodes,**
life cycle, feeding, habitat, British Isles 5909
- Necrophilus pettiti,**
life cycle, seasonal variations, habitat, geographical distribution, North America 2771
- Necrophorus,**
life cycle, feeding, habitat, British Isles 5909
- Necrodes,**
infection, fungi transmission, *Scolytus ventralis*, *Abies grandis* 8473.
- Nectar,**
competition, foraging behavior, *Phaethornis*, *Trigona ferricauda*, Panama 4409
dispersion, foraging behavior, pollinators, *Impatiens capensis* 6793
effects on abundance, *Solenopsis invicta*, *Gossypium* 5971
foraging behavior, energetics, *Apis mellifera* 6735
harvesting, regulation, honey storage, *Apis mellifera* 8593
pesticide residues, host plants, nontarget organisms, *Megachile rotundata*, *Medicago sativa* 8395
pollen, seasonal variations, *Apis mellifera* 5320
pollinators, competition, population density, niche overlap, *Bombus* 2059
production, plants, effects on pollinators 523
production, pollinators competition, *Centaurea scabiosa*, *Centaurea nigra* 6803
reinforcement, effects on foraging behavior, *Bombus sandersoni*, *Vespula vulgaris* 2049
reward, effects on feeding behavior, *Apis mellifera* 542
secretion, effects on feeding behavior, *Brassica campestris*, *Apis* 544
source, apiculture, ornamental plants, *Apis mellifera*, Israel 7714
standing crop, effects on feeding behavior, *Delphinium nelsoni*, *Bombus appostus* 495.
- Nectopsephala albida,**
flight activity, sexual reproduction, mating, oviposition, USA, Indiana 3862
- Nectopsephala taylori,**
larvae, morphology, bionomics, USA, Florida 6481
- Nectria galligena,**
association, *Cryptococcus fagisuga* infection, *Fagus grandifolia*, USA, West Virginia, Monongahela National Forest 9276
- Nelima gothica,**
new records, geographical distribution, habitat, Eire 6311
- Nemaphys picarellus,**
diets, food sources, Finland 7532.
- Nematini,**
taxonomic revision, nomenclature, Finland 7209
- Nematocampa filamentaria,**
pest outbreaks, abundance, life cycle, USA, Idaho 9305
pest outbreaks, species composition, life cycle, USA, Idaho 5889
- Nematoda,**
biological control, pest control, Insecta 7664
biological control, pest control, Insecta 7667
biological control, pest control, reviews, Insecta 7666
community composition, soil fauna, orchards, *Arthropoda* 7008
decomposition, leaf litter, deserts 2132
disease transmission, *Hyalomma anatolicum*, *Boophilus microplus*, India 2183
parasites, infectivity, salinity effects, *Culicidae* 266
parasites, infestation, biological control, *Cephalcia larciphila* 2959
parasites, Insecta 3956
parasites, taxonomy, Insecta hosts 3614
parasitism, sensilla, tarsi, *Chironomus* 6535
predation, new records, intertidal environment, *Staphylinus ater*, British Isles, Scotland, Ythan Estuary 8362
- Nematus,**
taxonomic revision, nomenclature, Finland 7209.
- Nemeritis canescens,**
kaoromones, hosts kaoromones effects on oviposition, *Ephestia kuehniella* 4384.
- Nemisia incerta,**
molting glands, histology 258.
- Nemobius sylvestris,**
migrations, locomotor activity, diel variations, light intensity, feeding behavior 153.
- Nemobrenthus aeneipennis,**
morphology, genitalia, males, New records, geographical distribution, Brazil 8755
- Nemobrenthus bechyni,**
new species, taxonomy, morphology, Brazil 8755.
- Nemobrenthus melzeri,**
morphology, genitalia, males 8755
- Nemobrenthus pereirai,**
new species, taxonomy, morphology, Brazil 8755.
- Nemopteridae,**
species lists, taxonomy, distribution, Turkey 4738
taxonomy, morphology, reviews, Turkey 4727.
- Nemoura klapperichi,**
new species, morphology, taxonomy, China, People's Rep. 3230.
- Nemouridae,**
taxonomy, morphology, collections 5608.
- Neoplectana,**
symbionts, pathogens, *Xenohabidus*, *Galleria* 4189.
- Neoplectana bibionis,**
parasites, infection, biological control, *Synanthedon tipuliformis* 2207.
parasitism, biological control, pests, *Otiorynchus sulcatus* 2188.
- Neoplectana carpocapse,**
infection, mortality, biological control, *Ctenocephalides felis* 6612.
- Neoplectana carpocapse,**
biological control, pest control, antidesiccants, *Leptinotarsa decemlineata* 3778.
biological control, pest outbreaks biological control, *Prionoxystus robiniae* 733.
biological control, pests, *Pyrrhata luteola*, *Choristoneura occidentalis* 2953.
parasites infection, biological control, *Hyposoter exquae* 1804.
parasites, pupae, susceptibility, *Galleria mellonella*, *Bombyx mori* 3406.
parasitism, pupae susceptibility, *Lepidoptera* 287.
pathogens, hosts immunity, *Hyalophora cecropia* 2641.
- Neopardio inyangani,**
new species, taxonomy, morphology, Zimbabwe 8789.
- Neosucia,**
taxonomy, nomenclature, synonymy 4004.
- Neoxonopsalbia judithae,**
new genera, taxonomy, morphology, Sri Lanka 7132.
- Neobidessus,**
taxonomy, morphology, South America 4817.
- Neobisium apasicum,**
new species, morphology, Italy 1594.
- Neobisnius,**
new species, morphology, geographical distribution, New Guinea 2398.
- Neoblatella puerilis,**
new records, geographical distribution, morphology, females, Brazil 9499.
- Neocampocarpus,**
new genera, taxonomy, morphology 4111.
- Neocetridium,**
new species, taxonomy, morphology, Kenya 4768.
- Neochetina bruchi,**
natural enemies, parasites, predators, Argentina 8379.
- Neochetina eichhorniae,**
introduced species, weed control, aquatic environment, *Eichhornia crassipes*, USA, Louisiana 1254
natural enemies, parasites, predators, Argentina 8379.
- Neoclerada,**
new genera, Cleradini, Australia 3210.
- Neoonoccephalus ensiger,**
sound production, aggregation behavior, movements, spatial distribution, males 9361.
- Neodiprion lecontei,**
effects on silviculture, economic importance, models, *Pinus resinosa*, USA 5413.
sex pheromone isomers, attractancy 3538.
- Neodiprion sertifer,**
bioassays, mortality, nuclear polyhedrosis virus 5722
climbing, roosting, trees, larvae, Finland 7522
colonies size, survival, mortality factors, eggs, larvae 1270
fecundity, sexual reproduction, environmental factors 7466
feeding behavior, deterrents, host plants, *Pinus sylvestris* 5952.
hosts, population density, host searching behavior, *Lophoproctus luteator* 6757.
- Neomemphra pictipennis,**
taxonomic revision, Finland 7961
- Neomemphra striata,**
taxonomic revision, Finland 7961
- Neomemphra tuomikoski,**
new species, taxonomy, morphology, Finland 7961.
- Neofuraria parauara,**
new species, taxonomy, morphology, Brazil, Para 4854
- Neofuraria urucuanus,**
morphology 4854
- Neoguerraspis,**
instars, morphology, taxonomy, keys 1713
- Neohaematopinus,**
taxonomy, morphology 8745
- Neohaployletus,**
new genera, taxonomy 4057
- Neotamus armatus,**
predatory behavior, food organisms 8250
- Neotamus margites,**
predatory behavior, food organisms 8250
- Neotamus vittipes,**
mating behavior, predatory behavior, food organisms 8250
- Neolaetana,**
taxonomic revision, morphology, phylogeny, Africa 7168
- Neolaiturus fenestratus,**
Microplasma phylloidy, disease transmission 8467
role, Mollicutes transmission, *Carthamus tinctorius* infection 5346

Subject Index

- Neolasioptera hellanthis**, infestation: larvae, seeds, *Helianthus annuus*, Fungi 2074.
- Neolindum**, new species, 5 species, morphology, Peru, Brazil 1616.
- Neomachlotica**, new genera, taxonomic revision, USA, Florida 2464.
- Neomachlotica spiraea**, new species, morphology, taxonomy, USA, Florida 2464.
- Neomeskelia bergii**, pests, new records, *Pennisetum typhoides*, India, Jodhpur 1441.
- Neomicropteryx nipponensis**, embryogenesis 4248.
- Neomicropteryx**, embryogenesis, developmental stages, phylogeny 330.
- Neonanorches**, new genera, morphology, USA, Texas, Padre I. 2381.
- Neonanorches ammoloches**, new species, morphology, USA, Texas, Padre I. 2381.
- Neonanorches pelosanguis**, new species, morphology, USA, Texas, Padre I. 2381.
- Neoneura waltheri**, morphology, oviposition, ecology, Argentina 3260.
- Neoperla**, taxonomy, morphology, new species, India 7240.
- Neoperla apoana**, taxonomic revision, nomenclature 8002.
- Neoperla claggi**, taxonomic revision, nomenclature 8002.
- Neoperla obscura**, new species, taxonomy, morphology, India 7240.
- Neoperla ochracea**, new species, taxonomy, morphology, India 7240.
- Neoperla pallescens**, taxonomic revision, nomenclature 8002.
- Neoperla pallicornis**, taxonomic revision, nomenclature 8002.
- Neoperla schmidiana**, new species, taxonomy, morphology, India 7240.
- Neoperla tritidis**, synonymy, *Chinoperla nigricipes* 7240.
- Neophantacrus**, new genera, taxonomy 7141.
- Neophantacrus mallothus**, new species, taxonomy, morphology, India 7141.
- Neophrocus flavicornis**, new records, geographical distribution, Czechoslovakia 778.
- Neophrocus lapponicus**, new records, geographical distribution, Czechoslovakia 778.
- Neophrocus scutellatus**, geographical distribution, Czechoslovakia 778.
- Neoplectana bibionis**, parasites, biological control, field trials, *Synanthedon tipuliformis* 7767.
- Neoplectana carpocapsae**, infection, soil, biological control, susceptibility, *Spodoptera exigua* 6160.
- Neopodonius**, new genera, taxonomy, morphology 4827.
- Neopodonius similis**, taxonomy, morphology, new records, Bhutan 4827.
- Neopogonipis ascriptus**, new species, taxonomy, morphology, Egypt 4908.
- Neopyulia bidentiformalis**, community composition, spatial distribution, burrows, China, People's Rep. 2895.
- Neoueraspis**, taxonomy, new genera, morphology, geographical distribution, East Asia 1643.
- Neorhynchus rajendran**, new species, taxonomy, morphology, India 7134.
- Neoselolus fallacia**, abundance, population structure, orchards, Malus, USA, North Carolina 588.
- Neoselolus**, predator-prey interactions, fecundity, development, oviposition, *Tetranychus urticae* 362.
- Neosomidalia**, systematics, *Coniopteryx* 2468.
- Neosilba**, new species, taxonomy, morphology, 3 species, Mexico, Colombia 4702.
- Neosilba**, taxonomic revision, keys, identification 4702.
- Neotermea boesi**, colonies, brood care, population density, seasonal variations, India 5418.
- Neotermea boesi**, digestive tract, enzymatic activity, carbohydrate metabolism 949.
- Neotermea boesi**, digestive tract, enzymatic activity, chitinase, symbionts 926.
- Neotermea boesi**, lipid composition, castes 7716.
- Neotermea boesi**, pH, digestive tract, hydrogen ions 1747.
- Neotimasius**, taxonomic revision, classification systems 4860.
- Neotoma albipila**, nontarget organisms, pest control, *Cochliomyia hominivorax*, USA, Southwest 2206.
- Neotoma micropus**, nontarget organisms, pest control, *Cochliomyia hominivorax*, USA, Southwest 2206.
- Neotrabas quadraculatus**, morphology, Kenya 1605.
- Neotropical Region**, collections, terminology, acronyms, museums, lepidoptera 7925.
- Neotropical Region**, geographical distribution, origin, taxonomy, *Chrysoides* 2374.
- Neotropical Region**, new genera, taxonomy, morphology, identification keys, *Xestonodion* 4776.
- Neotropical Region**, new species, taxonomy, morphology, *Listrophorus beaumonti*, *Listrophorus myops*, *Listrophorus nitor*, *Listrophorus rarus*, *Listrophorus serratus*, *Listrophorus typicus* 8756.
- Neotropical Region**, phoresy, reviews, *Scotocryptus*, *Meliponinae* 9130.
- Neotropical Region**, reclassification, genera, new species, *Clytinae* 7945.
- Neotropical Region**, taxonomy, synonymy, *Coccinellidae* 7956.
- Neotropiella**, taxonomy, morphology, new species, surveys, Brazil 4745.
- Neotrialepis plepaleola**, parasites, new species, new records, Australia 1589.
- Neotychius silfverbergi**, new species, taxonomy, morphology, USSR 5557.
- Neotyodectes**, new genera, taxonomy, morphology 2383.
- Neotyodectes mexicanus**, new species, taxonomy, morphology 2383.
- Neozygites floridana**, pathogens, effects on population decline, *Tetranychus urticae* 8400.
- Neozygites fresenii**, pathogens, pest control, efficacy, *Aphis fabae* 3038.
- Nepa clarea**, hematology, blood cells classification systems 99.
- Nepal**, case reports, honey toxicity, *Rhododendron pollen*, *Apis mellifera* 5321.
- Nepal**, check lists, new species, morphology, *Plecoptera* 3231.
- Nepal**, new species, *Aegialia wittmeri*, rare species, *Aegialia petrovitzii*, geographical distribution, *Aegialia terminalis*, *Aegialia lacustris*, *Aegialia cylindrica*, *Eremacus unistrans* 21.
- Nepal**, new species, ecological distribution, morphology, *Himalotrochodes insignis* 17.
- Nepal**, new species, new genus, taxonomy, morphology, *Cervicoris brevisstris* 7979.
- Nepal**, new species, new records, *Microdites* 18.
- Nepal**, new species, new subspecies, zoogeography, *Geotrupes* 807.
- Nepal**, new species, taxonomy, morphology, *Carabidae* 4798.
- Nepal**, new species, taxonomy, morphology, *Dicranocentrus* 6387.
- Nepal**, new species, taxonomy, morphology, *Dysaphis sharmai* 7199.
- Nepal**, new species, taxonomy, morphology, *Ectymachus nepalensis* 7169.
- Nepal**, new species, taxonomy, morphology, *Scirpophaga kumatai*, *Scirpophaga nepalensis* 7221.
- Nepal**, surveys, *Cerambycidae* 1609.
- Nepal**, Mike Danda Ridge, distribution, morphology, activity, *Laphria* 7615.
- Nepalocalathus**, revision, Nepal 808.
- Nephantis serinops**, coconut pests, chemical control, insecticides 1396.
- Nephantis serinops**, digestive tract, symbionts, occurrence, *Lindya* 6751.
- Nephantis serinops**, larvae, pathogenicity, *Paecilomyces farinosus* 1001.
- Nephantis serinops**, pests, parasitoids, *Brachymeria nasoni*, *Brachymeria nephanthus*, India, Kerala 6761.
- Nephantis serinops**, sterilization, chemosterilants, radiation 7458.
- Nephantis bicolor**, new species, taxonomy, morphology, Trinidad 5560.
- Nephantis nanosoma**, new species, taxonomy, morphology, Colombia 5560.
- Nephila clavipes**, webs, fibers, chemical composition, protein biosynthesis 186.
- Nephotechis**, chemical control, phenyl carbamates 2995.
- Nephotechis clausenae**, biotypes, emergence, Japan 2297.
- Nephotechis clausenae**, calling behavior, sound production, reproductive isolation 7498.
- Nephotechis clausenae**, electronic equipment, measurements, ingestion, saliva 1699.
- Nephotechis clausenae**, feeding behavior, comparative studies, strains, host plants 2856.
- Nephotechis clausenae**, host plants, pest resistance, *Oryza sativa* 3589.
- Nephotechis clausenae**, insecticides, synergism, malathion, kumai 3434.
- Nephotechis clausenae**, pest resistance, host plants, *Oryza sativa* 3004.
- Nephotechis clausenae**, pesticide resistance, enzymatic activity 2659.
- Nephotechis clausenae**, pesticide resistance, insecticides, enzymatic activity, carboxylesterase, Japan 5042.
- Nephotechis clausenae**, pesticide resistance, population studies, Taiwan 8504.
- Nephotechis clausenae**, pests, ecological distribution, population density, Japan 2142.
- Nephotechis clausenae**, rearing methodology, nutrient requirements, production 856.
- Nephotechis clausenae**, pesticide resistance, selection, enzymatic activity effects on 305.
- Nephotechis malayana**, calling behavior, sound production, reproductive isolation 7498.
- Nephotechis nigropictus**, calling behavior, sound production, reproductive isolation 7498.
- Nephotechis nigropictus**, calling behavior, sound production, reproductive isolation 7498.
- Nephotechis nigropictus**, calling behavior, sound production, reproductive isolation 7498.
- Nephotechis nigropictus**, disease transmission, vectors, rice tungro virus 7661.
- Nephotechis nigropictus**, feeding, host plants susceptibility, *Oryza sativa* 8569.
- Nephotechis nigropictus**, vectors, rice tungro virus, abundance, crop fields, *Oryza sativa* 7647.
- Nephrotheca ferruginea**, chromosomes, movements, U.V. radiation effects on, spermatocytes 4681.
- Nephrotheca ferruginea**, chromosomes, movements, Spermatocytes, spectroscopy 4683.
- Nepiota tringulata**, new records, geographical distribution, Sweden 4724.
- Nepitula castanopsiella**, life history, diapause, feeding, population dynamics 3561.
- Nepitula hesperalea**, new species, taxonomy, morphology, Hungary, Budapest 8677.
- Nepitula zoealis**, new species, taxonomy, morphology, Hungary, Budapest 8677.
- Nepitulae**, morphology, taxonomy, Cyprus 4892.
- Nepitulae**, new records, geographical distribution, rare species, 11 species, Netherlands 6330.
- Nerium oleander**, ectoparasites pests, *Aphis nerii*, USA, California 1276.
- Nerium oleander**, host plants, pest control, insecticides, *Aphis nerii* 722.
- Nerium oleander**, infestation, pests, *Dacus oleae*, Crete 9310.
- Neroecreations**, neuroendocrine system, circulatory system, anatomy, *Bagnarda cruciferum* 993.
- Nerve transmitters**, chilling effects on, *Periplaneta* 7360.
- Nerve transmitters**, interspersal flight, motor activity, *Drosophila* 7285.
- Nerve transmitters**, toxicity, piribedi, *Periplaneta americana* 3280.
- Nerves**, abdomen, role, egg production, *Rhodnius prolixus* 5080.
- Nerves**, antenna, development, larvae, *Tenebrio molitor* 9043.
- Nerves**, central nervous system, tissue culture, *Drosophila* 7381.
- Nerves**, development, leg, embryos, *Periplaneta americana* 8216.
- Nerves**, frogs, sodium channels, *Centruroides suffusus*, neurotoxins effects on 8175.
- Nerves**, staining methodology, 2-deoxy-D-glucose, *Isotriaena* 8013.
- Nerves**, ventral nerve cord, anatomy, comparison, families, *Apocrita* 8917.
- Nerves**, ventral nerve cord, anatomy, *Vespadidae* 8916.
- Nervous system**, acetylcholine distribution, *Periplaneta americana* 1736.
- Nervous system**, acetylcholine, *Musca domestica*, *Acheta domestica*, *Camponotus* 1735.

Nervous system, (continued)

- N-acetylcholine biosynthesis, *Schistocerca gregaria* 1734
 amino acids, characterization, *Stomoxys calcitrans* 3283
 amino acids, *Stomoxys calcitrans* 4125
 choline, larvae, *Musca domestica* 4076
 effects on motor activity, *Carassius morosus* 117
 giant axons, morphology, *Periplaneta* 897
 guanylnucleotides, adenylate cyclase, monomane, *Schistocerca gregaria* 6526
 mapping methodology, cobalt, *Schistocerca gregaria* 8844
 mechanoreceptors, *Periplaneta americana* 2537
 mechanoreceptors, *Periplaneta americana* 3285
 muscles, embryogenesis, *Periplaneta americana* 5812
 neurotoxins, pyrethroids, insecticides, effects on, *Periplaneta americana* 1040
 opioids receptors, *Leucophaea maderae* 2525
 role, egg production, *Rhodnius prolixus* 5080
 tissues, ganglia, N-acetylcholine, *Periplaneta americana* 128
Nesiodrosophila pleurostria,
 new species, India 784

- Nesoselandria minuta**,
 new species, taxonomy, morphology, Sri Lanka 5598

- Nessaea**,
 nomenclature, systematics, classification 839

- Nest building**,
 adults body size effects on, *Onthophagus garella* 2897
 colonial characteristics, *Synoea sunnana* 4643
 colonies, *Apictermes lamani* 5420
 colonies, structure, *Parschnogaster mellyi* 2278
 egg laying, *Cryptochirus* 1185
 foraging behavior, rhythms, *Hemides trunctorum* 4458
 galleries, oviposition, *Dendroctonus frontalis* 1891
 maternal behavior, body weight, fecundity, *Sceliphron assimile* 1905
 mounds, soil properties, *Isotera*, Pakistan 9369
 nest provisioning, defensive behavior, *Stictia maculata* 6666
 nest provisioning, predation, *Pompilidae*, USA, Florida 1948
 nesting behavior, larvae survival, *Onitis belati*, *Onitis* ion 6661
 nesting behavior, *Polistes chinensis antennalis* 2270.
 nesting behavior, queens, *Dolichovespula saxonica*, 4640
 nesting behavior, queens, *Vespula vulgaris*, *Vespula maculifrons*, *Vespula consobrina* 9364.
 nests parasites association, *Osmia marginata* 1965.
 orchards, pollination, agricultural practices, *Osmia lignaria propinqua* 6935.
 orientation, food preferences, *Hemides trunctorum* 4453.
 predators, *Odynerus dictatus* 7524.
 queens, *Vespula maculifrons*, *Vespula germanica*, *Vespula vulgaris*, *Vespula vidua*,
 culture, laboratories 1983.
 social behavior, colonies, *Reticulitermes lucifugus* 4650
Tanyoprymus monodeloides, *Ammatomus icaroides*, nesting behavior, biology 1901
 temperature effects, population density, female body size, emergence, effects on,
Dendroctonus frontalis 1879
 thermoregulatory behavior, *Trigona denoti* 2280
 variability, *Crabro advena* 438

- Nest building (non-reproductive)**,
 territoriality, workers, *Apictermes lamani* 6990.
 vegetation, colonies, *Myrmica sabuleti*, *Myrmica scabrinodis*, British Isles,
 England 8588.

- Nest provisioning**,
 brood care, social organization, trophallaxis, environmental effects, *Tapinoma*
errabum 4653
 division of labor, colonial characteristics, *Melipona favosa favosa* 7005.
 food organisms, nesting behavior, overwintering, *Liris argentata*, *Gryllus veletis*
 3623.

- nest building, defensive behavior, *Stictia maculata* 6666
 nest building, predation, *Pompilidae*, USA, Florida 1948
 nesting behavior, *Ectermius centralis* 6676
 nesting behavior, predatory behavior, *Alysson conicus* 5854
 variability, *Crabro advena* 438.

- Nesting**,
 colonial characteristics, population dynamics, *Vespula maculifrons* 6988.
 habitat preferences, walls, urban environment, *Megachilidae*, British Isles 1182.
 parental behavior, brood care, *Copris lunaris* 4292.
 preferences, swarms, *Apis mellifera* 8594.

- Nesting behavior**,
 burrowing behavior, dunes, *Colletes davesanus*, Germany, Fed. Rep. 7804
Cibidium microcephalum host plants, *Coleoptera*, *Formicidae* 4396
 colonial characteristics, activity patterns, *Vespula consobrina* 6220
 colonial characteristics, evolution, *Megachile rubi*, *Megachile texana* 6983.
 colonial characteristics, life history, *Bembix inyoensis* 6982
 colonial characteristics, movements, *Tapinoma sessile*, *Formica subsericea* 7004
 colonial characteristics, workers, *Polistes chinensis antennalis* 2269
 colonies, site selection, flight activity, *Vespula consobrina* 9357.
Diadassa afflicta, USA, Texas 9358.
 division of labor, colonial characteristics, *Melipona favosa favosa* 7005
 foraging behavior, *Agapostemon vivescens* 9446.
 habitat, ecological distribution, *Mischopus* 5991.
 habitat, feeding, life cycle, *Osmia maritima* 6851.
 habitat, oviposition, *Lyroda subita* 5845.
 habitat selection, *Metapolybia azteca*, Costa Rica 7800.
 interspecific relationships, colonies, mutualism, *Melipona flavipennis*, *Melipona*
fasciata 6985.
 life history, *Copris lunaris* 3533.
 males, *Oxybelus sericeus* 1968.
 mating behavior, parental behavior, *Eurytemerus* 7484.
 mating behavior, parental behavior, reproductive strategy, *Pachodynerus nasidens*
 6662.
 morphology, adaptations, *Palaeorhiza grataiosa* 1656.
 nest building, larvae survival, *Onitis belati*, *Onitis* ion 6661
 nest building, nest provisioning, defensive behavior, *Stictia maculata* 6666
 nest building, *Polistes chinensis antennalis* 2270.
 nest building, queens, *Dolichovespula saxonica* 4640.
 nest building, queens, *Vespula vulgaris*, *Vespula maculifrons*, *Vespula consobrina*
 9364.
 nest provisioning, *Ectermius centralis* 6676.
 nest provisioning, predatory behavior, *Alysson conicus* 5854
 nests morphology, *Agapostemon* 7006
 overwintering, *Liris argentata* 3623.
Polybia jurinei, Brazil 6222.

Nesting behavior, (continued)

- population establishment, pollinators, *Osmia lignaria propinqua*, USA, California
 9286
 predation, *Pompilidae*, USA, Florida 1948.
 sexual reproduction, *Eumenes allaudi*, Seychelles, Cousin I. 5903.
 site selection, social interactions, *Bembix pruinosa* 9366.
 social behavior, colonial characteristics, *Xylocopa rubescens* 7007
 spatial distribution, intraspecific relationships, *Bembix pruinosa* 5235
 swarming behavior, colonial characteristics, soil, *Isotera*, India 5426.
 sympatric populations, comparison, *Schizotetranychus celarius* 4465
Tanyoprymus monodeloides, *Ammatomus icaroides*, biology, nest building 1901
 territorial behavior, *Philanthus barbatus* 9360
Trypargilum nitidum schulthessi, *Trypargilum lactairei*, *Trypargilum saussurei*,
 Costa Rica 6980
 usurpation, burrows, *Crabro monticola* 9090
 variability, *Crabro advena* 438.
- Nests**,
 artificial substrates, rearing methodology, *Polistes* 1852.
 association, *Ceratophyllus*, *Indoprocne bucolor*, *Tachycineta thalassina* 6873.
 colonial characteristics, defense mechanisms, sound production (biological),
Synoea virginea 3847.
 colonial characteristics, new records, geographical distribution, *Solenopsis*
invicta, Puerto Rico 4642
 colonial characteristics, overwintering, *Vespula squamosa* 4644.
 colonial characteristics, sex ratio, *Polistes exclamans* 3045.
 communication, social behavior, alarm behavior, defensive behavior, *Synoea*
sunnana 4305
 competition, displacement, *Camponotus laevigatus*, *Formica haemorrhoidalis* 6855.
Cryptochelidius distinctus 2146.
 design companion, *Nasutitermes corniger*, *Nasutitermes ephratae*, Costa Rica,
 Panama 1958.
 development, colonies, *Vespula maculifrons*, *Vespula germanica*, *Vespula vulgaris*,
Vespula vidua 8592.
 diets, predators, *Bembix* 6033.
 distribution, density, rain forests, *Agelena consociata*, Gabon 5213.
 ecological distribution, shade effects on, *Catalaula guineensis*, Ghana 578.
 entomofauna, *Microgymnus minutus*, *Siphonaptera* 460.
 first records, *Osmia sculleni*, USA, Utah 5880
 flight range, population growth, *Pithitis smaragdula* 7564.
 fossils, Pleistocene epoch, *Hodotermitidae*, South Africa, *Clanwilliam* 5540.
 geographical distribution, environmental effects, forests, *Formica rufa*, France
 6850.
 geographical distribution, swarming behavior, *Odontotermes distans* 467.
 flight, sex ratio, *Aneides cinctus*, antelope, *Euoedipus foraminatus*, *Megachile*
relativa, *Megachile mendica*, *Megachile inermis* 1279.
 incompatibility, recognition pheromones, colonial characteristics, *Pseudomyrmex*
ferrugineus 7799.
 infestation, trees, damage, *Camponotus pennsylvanicus*, USA, New Jersey 8480.
 limiting factors, habitat preferences, *Apis mellifera* 452.
 Mammalia, abundance, habitat preferences, *Collemboles* 1179.
 materials, rearing methodology, *Megachile rotundata* 4921.
 morphology, nesting behavior, *Agapostemon* 7006.
 nest building, parasites association, *Osmia marginata* 1965.
 new records, *Osmia sculleni*, USA, Utah 9101.
 nymphs development, synchronization, *Odontotermes stercorivorus* 6997.
 orientation, feeding experience, *Paravespa vulgaris* 6695.
 pests occurrence, *Apis mellifera*, *Pseudohyocopa kertezi*, Colombia 1315.
 population density variation, *Delichon iberica*, *Delichon urbica*, *Ceratophyllus hirundinis*,
Ceratophyllus farenii, *Ceratophyllus rusticus* 6030.
 prey, behavior, *Pison*, Australia 1957
 queens, *Atta texana*, USA, Louisiana 3046.
 queens, morphology, *Schedorhynchus breinli*, Australia 1482.
 resource utilization, sympatric populations, *Leptomyrmex* 2900
 site location, *Formica yessensis*, seasonal variations, Korea, Rep.,
 Gyeongsang-Nam-Do, 4448
 social behavior, foraging behavior, *Dorylinae* 5425.
 social behavior, *Vespa affinis*, Thailand 2281
 species composition, population levels, *Mammalia*, *Collembola* 570.
 structure, *Polybia jurinei*, Brazil 6222
 structure, thermoregulatory behavior, *Trigona denoti* 2280.
 symbiosis, species composition, *Diplopoda*, *Formicidae* 8382.
 territorial behavior, nesting behavior, males, *Oxybelus sericeus* 1968.
- Netherlands**,
 flowers, pollination, feeding, *Lejops vitata* 2061
 host-parasite interactions, parasitoids, *Poecilostictus citharus*, *Bupalus*
piniarius 5179
 new records, geographical distribution, rare species, 11 species, *Nepticulidae*
 6320
 occurrence, new records, *Coleophora hydropathella*, *Coleophora squalorella* 9478.
 Trichoptera, larvae, check lists, streams, freshwater ecosystems 1574.
Netherlands, Maarsseveen I L.,
 feeding behavior, habitat selection, ecological distribution, community
 composition, *Acan* 5433.
Netherlands, Voorn I.,
 rare species, new records, geographical distribution, *Eupurae melanocephala*,
Coleoptera 6321
Netherlands, Wolderwijd L.,
 environmental factors, emergence, *Chironomidae* 751
Nets,
 catching methods, motor vehicles, *Hypera metes* 4088
Neudusmetia sangwani,
 parasites, *Antonia grammis*, South Africa 2029
Neurochemistry,
 anterior median eye, calcium, magnesium, sensitivity, illumination, *Menemerus*
confusus 5667
Neuroctenus discrepans,
 new species, morphology, Mexico 31
Neuroctenus termitophilus,
 new species, taxonomy, morphology, Pakistan 5577
Neuroendocrine system,
 cells, sex hormones source, *Rhodnius prolixus* 964
 circulatory system, anatomy, neurosecretions, *Bagrada cruciferarum* 993
 diapause, *Insecta* 3478
 effects on oogenesis, *Camponotus lateralis* 2706
 effects on ovulation, *Glossina moritans* 388
 environmental effects, *Insecta* 3338

Neuroendocrine system, (continued)

morphology, physiology, *Periplaneta americana* 5004.
 oogenesis, *Aedes aegypti*, *Aedes taeniorhynchus* 5832.
 oviposition, temperature effects, *Dysdercus koenigii* 4260.
 role, diapause, larvae, *Diatraea grandiosella* 3476.

Neurohormone D.

biochemical characteristics, amino acid composition, *Periplaneta americana* 5698.
 effects on heart rate, *Periplaneta americana* 5674.

Neurological complications,

immune response, man, new records, bites, *Ixodidae* 8411.

Neuromuscular junctions,

electrical properties, ultrastructure, *Lepidoptera* 4116.
 presynaptic acetylcholine receptors, characterization, *Schistocerca gregaria* 8908.
 structures, flight muscles, development, *Manduca sexta* 8910.
 toxicity, venom, *Crustacea*, *Latrodectus mactans* 9017.
 ultrastructure, *Acrididae* 4121.

Neurons,

anatomy, cerci, *Periplaneta americana* 5664.
 antennae, mutants, morphology, *Drosophila* 142.
 antennal sensilla, larvae, *Simulium* 4135.
 auditory perception, morphology, neurophysiology, *Gryllus bimaculatus* 4960.
 auditory perception, neurophysiology, tympanum, larvae, *Locusta migratoria* 4970.
 axons, regeneration, muscles, *Telegryllus oceanicus* 2530.
 central nervous system, biochemical analysis, neurotransmitters, *Insecta* 3284.
 cerci, acoustic responses, stridulation frequency, song, *Gryllus campestris* 4972.
 coordination, spiracles, ventilation, thorax, *Locusta migratoria* 5665.
 development, neurotoxins, receptors, *Scorpionida* 8209.
 ear, anatomy, *Agrotis segetum* 5662.
 ectopic neurons, growth, sensors, central nervous system, reviews, *Insecta* 3471.
 electrical properties, motor activity, muscles, *Paruroctonus mesaensis* 113.
 electrical properties, motor activity, muscles, *Paruroctonus mesaensis* 120.
 electrical stimulation, control, flashing, males, *Photinus versicolor* 994.
 epithelia, sensors, electric currents, *Acheta* 2528.
 leg, embryogenesis, *Locusta migratoria* 337.
 lesions, dendritic branching, metathoracic costal depressor motoneuron, *Periplaneta americana* 7292.
 lesions, effects on motor activity, *Periplaneta americana* 4128.
 mechanoreceptors, auditory perception, *Locusta migratoria*, *Decticus verrucivorus*, *Tettigonia cantans* 7293.
 mechanoreceptors, toxicity, venom, *Crustacea*, *Latrodectus mactans* 9017.
 mechanoreceptors, ultrastructure, *Pieris rapae* 903.
 membrane potential, synapses, ocelli, brain, *Locusta* 4961.
 monoamine, distribution, brain, neurosecretion, *Bombus mori* 3279.
 morphology, auditory perception, *Gryllus bimaculatus* 129.
 morphology, defective mutant, leg, *Drosophila* 896.
 muscles, development, comparative studies, instars, adults, *Locusta migratoria* 3277.
 mutation, triptophan metabolism, *Drosophila melanogaster* 1534.
 neurophysiology, visual perception, movements, *Musca domestica* 7303.
 neurosecretion, histology, immunohistochemistry, *Locusta migratoria* 901.
 neurosecretion, neurophysiology, morphology, literature reviews, *Insecta* 900.
 ocelli, visual perception, effects on orientation, *Schistocerca gregaria* 909.
 octopamine receptors, *Limulus*, *Periplaneta americana* 130.
 optic ganglia, morphology, ultrastructure, *Apis mellifera* 6525.
 orientation, gravity sensitivity, *Gryllus* 895.
 retina, growth, development, *Blattodea* 898.
 thorax ganglia, physiology, morphology, *Locusta migratoria* 8065.
 thorax sensilla, anatomy, mutants, *Drosophila* 4962.
 visual perception, visual discrimination, *Musca domestica* 140.
 wind perception, sensory stimuli, *Periplaneta americana* 7291.

Neurophysiology,

γ -amino butyric acid effects on, hemolymph, *Lepidoptera* 4152.
 auditory perception, *Locusta migratoria* 5663.
 auditory perception neurons, *Gryllus bimaculatus* 4960.
 auditory perception, neurons, tympanum, larvae, *Locusta migratoria* 4970.
 bioluminescence, visual communication, courtship, *Photinus luciferescens* 5848.
 electrical properties, auditory perception, receptors, *Corixa punctata* 4134.
 endocrinology, physiology, *Insecta* 3955.
 escape behavior, walking, *Periplaneta americana* 2529.
 flight muscle activation, *Insecta* 1733.
 gravity perception, *Calliphora erythrocephala* 7299.
 juvenile hormones biosynthesis, corpora allata, starvation, *Leptinotarsa decemlineata* 8106.
 larviposition, *Glossina fuscipes* 3496.
 mechanoreceptors, auditory perception, *Locusta migratoria*, *Decticus verrucivorus*, *Tettigonia cantans* 7293.
 mechanoreceptors, *Locusta migratoria* 6533.
 mechanoreceptors, *Periplaneta americana* 4130.
 mechanoreceptors, vibratory stimuli, *Locusta migratoria*, *Decticus verrucivorus* 3298.
 molting behavior, abdomen, rhythms, *Schistocerca* 3278.
 morphology, neurosecretion, neurons, literature reviews, *Insecta* 900.
 motor activity, oviposition, *Acheta domestica* 4266.
 motor activity, *Periplaneta americana* 4128.
 muscles, locomotion, *Periplaneta americana* 4958.
 neurons, spiracles, ventilation, thorax, *Locusta migratoria* 5665.
 neurons, visual perception, movements, *Musca domestica* 7303.
 octopamine, reviews, *Insecta* 4127.
 pheromone emission, sex pheromone, *Lymantria dispar* 5699.
 piridol, nerve transmission, *Periplaneta americana* 3280.
 rhythms, respiratory system, *Anaethenopsis julius* 5670.
 sense organs, horizontal cells, *Phaenicia sericata* 4138.
 toxicity, benzyl chrysanthemates, physicochemical properties, *Periplaneta americana* 5798.
 toxicity, benzyl chrysanthemates, symptoms, *Periplaneta americana* 5795.
 venom effects on, *Periplaneta americana*, *Philaenus triangulum* 4217.
 visual perception, motion, *Phormia terranova* 7304.
 visual perception, motor activity, flight, *Drosophila melanogaster* 6683.
 vocalization, defensive behavior, predators, *Cynia tenera*, *Chiroptera* 5914.

Neurophysiology,

larviposition, *Glossina fuscipes* 3496.
 mechanoreceptors, auditory perception, *Locusta migratoria*, *Decticus verrucivorus*, *Tettigonia cantans* 7293.
 mechanoreceptors, *Locusta migratoria* 6533.
 mechanoreceptors, *Periplaneta americana* 4130.
 mechanoreceptors, vibratory stimuli, *Locusta migratoria*, *Decticus verrucivorus* 3298.
 molting behavior, abdomen, rhythms, *Schistocerca* 3278.
 morphology, neurosecretion, neurons, literature reviews, *Insecta* 900.
 motor activity, oviposition, *Acheta domestica* 4266.
 motor activity, *Periplaneta americana* 4128.
 muscles, locomotion, *Periplaneta americana* 4958.
 neurons, spiracles, ventilation, thorax, *Locusta migratoria* 5665.
 neurons, visual perception, movements, *Musca domestica* 7303.
 octopamine, reviews, *Insecta* 4127.
 pheromone emission, sex pheromone, *Lymantria dispar* 5699.
 piridol, nerve transmission, *Periplaneta americana* 3280.
 rhythms, respiratory system, *Anaethenopsis julius* 5670.
 sense organs, horizontal cells, *Phaenicia sericata* 4138.
 toxicity, benzyl chrysanthemates, physicochemical properties, *Periplaneta americana* 5798.
 toxicity, benzyl chrysanthemates, symptoms, *Periplaneta americana* 5795.
 venom effects on, *Periplaneta americana*, *Philaenus triangulum* 4217.
 visual perception, motion, *Phormia terranova* 7304.
 visual perception, motor activity, flight, *Drosophila melanogaster* 6683.
 vocalization, defensive behavior, predators, *Cynia tenera*, *Chiroptera* 5914.

Neuroptera,

larvae, development, morphology 8878.
 larvae, morphology 8876.
 species composition, sampling, traps, attractants 1666.

Neurosecretion,

brain cells, diapause, activation, *Calliphora vicina* 6639.

Neurosecretion, (continued)

brain, ovary development effects on, *Acheta domestica* 984.
 cells, brain, ultrastructure, pupae, *Bombus mori* 991.
 cells, cytology, brain, *Amsacta collaris* 249.
 cells, ecdysone synthesis, assays, *Manduca sexta* 3343.
 cells, eye, *Hersilia savignyi* lucas 2577.
 cells, ganglia, larvae, *Sarcophaga lineatocollis* 2526.
 cells, pars intercerebralis, *Bombus mori* 3279.
 cells, spatial distribution, histology, brain, ventral nerve cord, *Poecilochorus pictus* 5666.
 corpora allata, physiology, developmental stages, *Achoea junata* 4176.
 distribution, brain, *Kaloterpes flavicollis*, *Anacanthonotermes shugreriensis*, *Reticulitermes lucifugus* 123.
 effects on accessory gland maturation, *Glossina morsitans* 354.
 6-L-tryptophan effects on, *Pieris brassicae* 4126.
 neurons, histology, neurosecretion, immunohistochemistry, *Locusta migratoria* 901.
 neurophysiology, morphology, neurons, literature reviews, *Insecta* 900.
 nuclear polyhedrosis virus effects on, larvae, *Spodoptera litura* 275.
 opio lobe, cytology, histology, *Poecilochorus pictus*, *Periplaneta americana*, *Belostomatid*, *Polistes bibeatus*, *Sandrocottus dejeani* 4180.

Neurosecretions,

cells brain, *Trichoptera*, biochemical analysis, 992.
 hormones, neuroendocrine system, *Periplaneta americana* 5004.
 Neurosecretory cells, cytology, castes, *Polyelectrotermes nayan* 8914.
 localization, catecholamines, peptides, *Locusta migratoria* 8907.
 Neurotoxins, *Centruroides suffusus*, effects on sodium channels, frogs, nerves, rats brain synaptosomes 8175.
 α -latrotoxin, effects on neurotransmitters release, rats, *Latrodectus mactans* 9017.
 pyridoxal, effects on giant axons, *Periplaneta americana* 8176.
 pyridoxal, insecticides, effects on, nervous system, *Periplaneta americana* 1040.
 receptors, development, neurons, *Scorpionida* 8209.
 structure, X-ray crystallography, *Centruroides sculpturatus* 8174.
 tryptoxin effects on biosynthesis, release, acetylcholine, brain, rats, *Titus simulans* 8180.

Neurotransmitters,

biochemical analysis, neurons, central nervous system, *Insecta* 3284.
 diapause effects on, *Gryllus campestris* 1099.
 effects on mammalian central nervous system, insects 200.
 inhibitors, GABA, neurons, *Periplaneta americana* 127.
 lunar rhythm, *Periplaneta americana* 121.
 octopamine, reviews, *Insecta* 4127.
 synaptosomes, rats, neurotoxins effects on, α -latrotoxin, *Latrodectus mactans* 9017.
 tryptocin, *Insecta* 8179.

Neurotrichus gibbii,

host, parasites, new species, *Eadna neurotrichus* 796.

Neutral genes,

mdh gene, e-S gene, alleles frequency, *Drosophila pseudoobscura* 4673.

Neurons radiating,

effects on chromosomes markers, spermatogenesis, *Drosophila melanogaster* 2312.

mutation, *Drosophila melanogaster* 7038.

Neutrons,

effects on translocations, spermatogenesis, *Drosophila melanogaster* 2331.

New Britain,

new species, taxonomy, morphology, *Timisia yaloma* 4053.

New Caledonia,

abundance, species composition, seasonal variations, *Lepidoptera* 4441.
 biology, predators, *Coelophora quadrivittata*, *Coccus viridis* 2774.
 chemical control, *Lycopersicon esculentum* crop fields, *Insecta* 4585.
 ecological distribution, habitat, agricultural land, *Lepidosaphes beckeri* 4429.
 new records, taxonomy, *Conixidae* 8800.
 new species, taxonomy, morphology, *Monteithostolus genitalis* 6417.

New families,

taxonomy, *Monteithostolidae* 6417.
 taxonomy, morphology, *Tucanalgae* 2382.
 taxonomy, morphology, *Xolalginae*, *Zumptinae* 2382.
 taxonomy, revision, *Cicadellidae*, *Africa* 828.
 taxonomy, revision, *Cicadellidae*, *Africa* 829.

New genera,

Arctidea, *Austroclerada*, *Laticlerada*, *Neoclerada*, *Paramahisa*, *Australia* 3210.
Aubertetius, *Compuprocus* 4029.
Caladomyia, South America, Amazon R. 4838.
Cercoriza, Papua New Guinea, Solomon Is. 4885.
Hillelita, *Colpoclella*, *Australia*, Northern Territory 3208.
 morphology, *Bumetia*, Panama 1634.
 morphology, geographical distribution, *Austropanphandus* woodwardi, *Woodwardiophagus* gracilis, *Australia* 825.
 morphology, *Neonorchestres*, USA, Texas, Padre I. 2381.
 morphology, *Olethreutinae*, *Madagascar* 843.
 morphology, *Sinoprosia*, China, People's Rep. 3197.
 morphology, *Suphylinides*, *Galapagos Islands* 1611.
 morphology, taxonomy, *Anobryidae*, *Anobryidae* 816.
 morphology, taxonomy, *Astromoides* 2469.
 morphology, taxonomy, *Damascaria*, *Madagascar* 3209.
 morphology, taxonomy, *Listrophoridae* 2384.
 morphology, taxonomy, *Tucanalgae* 2382.
 new species, fossils, *Schlieterniina* *canoniana*, France 1623.
 new species, geographical distribution, *Pocillocooccus longibolus*, *Australia* 827.
 new species, *Halteriidae* *perardensis*, Hungary 37.
 new species, *Margodesia* *desmieri*, Ivory Coast 1791.
 new species, morphology, *Leptopirina* *papillata* 1598.
 new species, *Murphyella* *aliquantula*, *Timorochorus* *paululus*, Singapore 8802.
 new species, parasites, *Nasaliages* *borensis* 11.
 new species, taxonomy, *Cypharthria* *pseudolivalis* 41.
 new species, taxonomy, *Helidae* 4866.
 new species, taxonomy, *Kesselmyia* *chandleri*, *Czechoslovakia* 4003.
 new species, taxonomy, *Maripeteryx* *caranculus*, USA, Texas 5604.
 new species, taxonomy, morphology, *Aegianella* *koponeni*, USSR, Abkhazia 6429.
 new species, taxonomy, morphology, *Annampheres* *tytostocostae*, Brazil 8741.
 new species, taxonomy, morphology, *Arbortrichonius* *stymocostae*, Canada, Ontario 5546.
 new species, taxonomy, morphology, *Badlessa* *guenthartae*, Africa 33.
 new species, taxonomy, morphology, *Ceratoletes* *proboisii*, Brazil 8739.

New genera, (continued)

- new species, taxonomy, morphology, *Guatubesia* clare, Brazil, São Paulo 6353.
 new species, taxonomy, morphology, *Hadzhibeylia physocera*, USSR, Georgia 6440.
 new species, taxonomy, morphology, *Idiopis opaca*, Gondvandelium seirotranoideis.
 new species, taxonomy, morphology, *Physogasterium lanuginosum*, South America 7949.
 new species, taxonomy, morphology, *Misotropus mendopitius*, Brazil 6354.
 new species, taxonomy, morphology, *Notodontidae*, Africa 4039.
 new species, taxonomy, morphology, *Ocostigma herbivora*, Tonga 6388.
 new species, taxonomy, morphology, *Oscinocampa falcipier*, Spain, Santander.
 new species, taxonomy, morphology, *Oribitacus obscurus*, USA, California 6450.
 new species, taxonomy, morphology, *Parapatellia eugeniae*, USSR, Ukraine 7218.
 new species, taxonomy, morphology, *Trichalcidion penicillum*, Venezuela 4780.
 new species, taxonomy, morphology, *Trogloionomus novaehermiae*, Papua New Guinea 4814.
 parasites, *Mitonyssus*, *Chiroptera*, South America 10.
Pseudolardea, *Idiomysus*, *Aethomyia*, *Cyrtomyia*, *Cuneiceps*, *Mascarenes* 4864.
 reclassification, taxonomic revision, *Microgastriinae* 6437.
 taxonomic revision, *Alloleemania* 4886.
 taxonomic revision, *Gypona*, *Marganialana*, *Carnosea* 2444.
 taxonomic revision, *Hydroptilidae*, Australia 8703.
 taxonomic revision, *keys*, *Hylaeus* 4022.
 taxonomic revision, morphology, *Cornuchares*, *Parastathmodera*, *Paramussardia*, *Pseudocrossotus*, *Paragasoma*, Africa 7939.
 taxonomic revision, *Neomachlota*, USA, Florida 2464.
 taxonomic revision, *Tydesa lewisii* 7948.
 taxonomy, *Ambostrinae*, Australia 8819.
 taxonomy, *Angioleia* 4014.
 taxonomy, *Ambiciclops* 8801.
 taxonomy, *Anupama*, India 7208.
 taxonomy, aquatic animals, *Dytiscidae*, Brazil 809.
 taxonomy, *Aspermaeus* 7933.
 taxonomy, *Barutus* 7950.
 taxonomy, *Beerellus* 7955.
 taxonomy, *Brachyana* 7189.
 taxonomy, *Brachylobopyga* 8811.
 taxonomy, *Campephiloptes*, South America 7144.
 taxonomy, *Cnethocyma* 8800.
 taxonomy, *Dipolorynacus* 8714.
 taxonomy, *Donicotopus bicandatus*, Canada, Northwest Territories 4826.
 taxonomy, *Epicicophyes*, India 7138.
 taxonomy, *Epicheutes* 8743.
 taxonomy, *Euraidea* 6340.
 taxonomy, *Flavicorniculum*, China, People's Rep. 3996.
 taxonomy, *Hughecia*, Australia 4779.
 taxonomy, *Hulechius*, USA, Arizona, Mexico 4784.
 taxonomy, *Indodrombopus*, India 7172.
 taxonomy, *Indophasus*, India, Kerala 7159.
 taxonomy, *Ischyromenus* 4786.
 taxonomy, *Latigena*, Mexico 4863.
 taxonomy, *Latriobella* 4909.
 taxonomy, *Leptopnebridae*, South America 5575.
 taxonomy, *Lojus* 7985.
 taxonomy, *Mitonyssus* 7935.
 taxonomy, *Mordellistenochra* 8749.
 taxonomy, morphology, *Aethophenax*, Ethiopia 7932.
 taxonomy, morphology, *Aleurodiphus americanus* 2456.
 taxonomy, morphology, *Archethraulodes*, *Demoulinellus*, *Rhigotopus*, *Secochela*, South America 7976.
 taxonomy, morphology, *As*, *Ilerylon*, *Mascarenes* 4813.
 taxonomy, morphology, *Atlantides*, Brazil 8836.
 taxonomy, morphology, *Caenobryetia echinoflagellata*, Brazil 1630.
 taxonomy, morphology, *Callinotopoides albomaculatus*, Sri Lanka 3182.
 taxonomy, morphology, *Carpinophoridae*, Ecuador 5563.
 taxonomy, morphology, *Chaetotrichia*, *procerus*, Japan, Shikoku L. 4818.
 taxonomy, morphology, *Chudalupia*, Australia, Western Australia 2379.
 taxonomy, morphology, *Claudiavina miranda*, India, Sri Lanka 4883.
 taxonomy, morphology, *ethocynatua*, Australia 4748.
 taxonomy, morphology, *Comptomeria*, USA, South Carolina 3194.
 taxonomy, morphology, *Corillidia*, Peru 8806.
 taxonomy, morphology, *Cosmozercon*, *Parhozercon*, USA 4.
 taxonomy, morphology, *Curculionidae*, *Rhynchophoridae*, *Ogasawara* Is. 3979.
 taxonomy, morphology, *Diploschia*, North America 1659.
 taxonomy, morphology, *Drosophilidae*, Australia 8705.
 taxonomy, morphology, *Dryocba*, *Zonocba*, Europe 4935.
 taxonomy, morphology, *Duculacrus*, Indonesia 2387.
 taxonomy, morphology, *Edovum putleri* 2454.
 taxonomy, morphology, *Elongeuma speophillum*, *USR* 8843.
 taxonomy, morphology, *Formenolabis afgana* 2406.
 taxonomy, morphology, *Garanimiris*, *Jessopoensis*, *Rotundomiris* 4851.
 taxonomy, morphology, geographical distribution, *Neocnematus*, East Asia 1643.
 taxonomy, morphology, *Gonzalezius*, Chile, *Amaphysus*, Brazil, *Amaphysa* 4854.
 taxonomy, morphology, *Hausserophthiracrus*, Greece 7142.
 taxonomy, morphology, *Hylaeus*, *Laccolbia*, Australia 4749.
 taxonomy, morphology, *Johnbelkina* 6400.
 taxonomy, morphology, *keys*, *Larinia* 4773.
 taxonomy, morphology, *Knua*, Africa 6356.
 taxonomy, morphology, *Neocymen*, North America, West 8821.
 taxonomy, morphology, *Macropsis* 3212.
 taxonomy, morphology, *Minymischa* 6441.
 taxonomy, morphology, *Monteithostolus*, New Caledonia 6417.
 taxonomy, morphology, *Monnyssus* 7145.
 taxonomy, morphology, *Napodytes*, Ecuador 6355.
 taxonomy, morphology, *Neoxanopsalpis judithae*, Sri Lanka 7132.
 taxonomy, morphology, *Neoxanopsalpis* 4111.
 taxonomy, morphology, *Neophantiscus mallotus*, India 7141.
 taxonomy, morphology, *Neopodanus* 4827.
 taxonomy, morphology, *Neotyodes* 2383.
 taxonomy, morphology, *Ocosomechusa besucheti*, *Emmelostiba besucheti*, Lebanon 7164.
 taxonomy, morphology, *Parabupares*, *Sotekia* 7155.
 taxonomy, morphology, *Peritropella*, Madagascar 4852.
 taxonomy, morphology, *Primapospaltella* 2450.
 taxonomy, morphology, *Psocidae*, New Guinea 3232.
 taxonomy, morphology, *Ptychopsis phalaris*, Ecuador 835.
 taxonomy, morphology, *Spilotragnidae*, Africa 7938.
 taxonomy, morphology, *Staphylinidae*, Asia 4812.

New genera, (continued)

- taxonomy, morphology, *Tingidae*, Africa 1633.
 taxonomy, morphology, *Tingidae*, Africa 4856.
 taxonomy, morphology, *Tremus* 8754.
 taxonomy, morphology, *Trypoxylon*, *Fornosa* 4884.
 taxonomy, morphology, *Umbrella*, New Guinea, *Umbro* I. 4852.
 taxonomy, morphology, *Woldana*, Panama 2439.
 taxonomy, morphology, *Xamatus*, Australia 2389.
 taxonomy, morphology, *Xestodion*, Neotropical Region 4776.
 taxonomy, morphology, *Xylotopus*, *Nearctic* Region 3994.
 taxonomy, morphology, 3 genera, *Aradidae*, India 4859.
 taxonomy, morphology, 4 genera, *Archocyrtini* 3183.
 taxonomy, *Neophylotenus* 4057.
 taxonomy, *Nidurba* 7974.
 taxonomy, *Niphanele*, Thailand 7187.
 taxonomy, nomenclature, *Hydropnon* 4772.
 taxonomy, *Pacifiulus* 5465.
 taxonomy, *Pagelmis*, Ecuador 4790.
 taxonomy, *Paraceratopha meridionalis* 6341.
 taxonomy, *Paracypidaspis wilkeyi*, morphology 1644.
 taxonomy, *Platyacrus* 8719.
 taxonomy, *Plecoptera*, Australia 4907.
 taxonomy, *Prostolus* 6368.
 taxonomy, *Pseudodictyocentrus*, morphology 3191.
 taxonomy, *Pseudosyllabus*, India 7158.
 taxonomy revision, *Parabolopinae* 1640.
 taxonomy revision, *Usambilla* 1669.
 taxonomy, *Samoria*, *Anatella* 5561.
 taxonomy, *Sinistachia*, China, People's Rep. 847.
 taxonomy, systematics, *Ebora plana*, *Elsieila* 2434.
 taxonomy, *Tallaperla* 6458.
 taxonomy, *Tarsophilus* 4063.
 taxonomy, *Tepidus breweri*, Venezuela 3184.
 taxonomy, *Trypanophellus*, Cuba 7167.
 taxonomy, *Zahenites* 6350.
 taxonomy, *Tuberonembrana*, China, People's Rep. 24.
 new genus, taxonomy, *Cervicoris*, Nepal 7979.
 new Guinea, new records, geographical distribution, *Eriotremex* 3149.
 new species, morphology, geographical distribution, *Staphylinidae* 2398.
 new species, *Sybra mozzoni* 3182.
 new species, taxonomy, morphology, *Caledonemphala papana* 4806.
 new species, taxonomy, morphology, *Dirla puleni* 4910.
 new species, taxonomy, morphology, *Leucopetra psophocarpa* 4897.
 parasites, new species, *Toritrombicula kirchocephalus*, *Pitohui kirchocephalus* 3968.
 pest control, biological control 5357.
 pest control, chemical control, biological control, *Pantorhytes* 2989.
 taxonomy, morphology, geographical distribution, *Parkanchia*, *Sauroneura* 837.
 taxonomy, morphology, geographical distribution, *Tartessinae* 7884.
 taxonomy, morphology, *Histeridae* 2393.
 taxonomy, morphology, *keys*, *Psocidae* 3232.
 new Guinea, *Umbro* I., new species, new genera, *Umbroella antennata* 4852.
 new Hebrides, pest control, biological control, predators, *Coccinellidae*, *Temnaspidiotus* 4576.
 new record, geographical distribution, *Campomeris hesteriae*, USA, Texas, Rio Grande Valley 1975.
 new records, *Aneristes ceroplatiae*, parasites, *Coccus hesperidum*, papaya, India 2040.
Antelethe rubella, China, People's Rep. 36.
Apaturina eminea, geographical distribution, Australia, North Queensland 2375.
 bogs, peatlands, *Microlepidoptera*, *Czechoslovakia* 9481.
Centururus, Bahama Is., Dominican Republic 8744.
Chaloscirtus martensi, *Sitticus avocator*, *Yllenus aspey*, India 801.
cleptoparastim, *Anraee*, *Cecidomyiidae*, USA, Florida 1995.
Coleoptera, West Indies 806.
Derovatellus, Cameroon, Senegal, Uganda 4781.
 disease transmission, parasites, sheep, *Babesia motasi*, *Haemaphysalis punctata*, British Isles 4538.
 distribution, *Braconidae*, *Czechoslovakia*, Vah R. 573.
Drymus, *Drymus armati*, Cuba 8732.
 ecological distribution, *Ephemeroptera*, *Czechoslovakia*, *Latorica* R. 2355.
 ectoparasites, geographical distribution, birds, *Arthropoda*, USA, Alaska 520.
Encoposilus laqueatus, Africa 3219.
 feeding behavior, *Bracharia ramosa*, *Ostrinia nubilis* 484.
 forests, ornamental plants, *Thysanoptera*, Israel 9479.
Fresca sublimis, Mexico 4820.
 geographical distribution, *Acanthoscelides pallidipennis*, Europe 3932.
 geographical distribution, *Acantophthalmus nigrinus*, *Agathomyia*, Eire 7889.
 geographical distribution, *Acretopus niveus*, Switzerland, Geneva L. 779.
 geographical distribution, *Acerbia alpina*, Sweden, Abisko 4713.
 geographical distribution, *Acleris maccana*, USA, Virginia 3161.
 geographical distribution, *Acroera globulus*, *Limnia paludicola*, *Sphacrophora* 4061, Ireland 4706.
 geographical distribution, *Acrotichis insularis*, Finland 7897.
 geographical distribution, *Aculops niphocladus*, India 7137.
 geographical distribution, *Agrias aedon rodriguezi*, Costa Rica 7233.
 geographical distribution, *Agromyzidae*, Iraq 5522.
 geographical distribution, *Allusodorus fuscipes*, India 4000.
 geographical distribution, *Alicinae*, China, People's Rep. 6322.
 geographical distribution, *Alicinae*, India 7160.
 geographical distribution, *Anchylorhynchus bicarinatus*, new species, Panama 1614.
 geographical distribution, *Andrena haynesi*, USA 5527.
 geographical distribution, *Andrena haynesi*, USA, Illinois, Henderson Co. 9495.
 geographical distribution, *Anopheles typicus*, France, Lyon 1571.
 geographical distribution, *Anthidium tolemae*, USA 7115.
 geographical distribution, *Anthocharis euphenoides*, *scolitantides orion*, Spain 3138.
 geographical distribution, *Anthomyiidae*, India 7913.
 geographical distribution, *Apanteles*, Hungary 3157.
 geographical distribution, *Aphididae*, India 4734.
 geographical distribution, *Aphididae*, India 7909.
 geographical distribution, *Aphididae*, India 8688.

New records, (continued)

- geographical distribution, Apion lethierryi, Bulgaria 4710.
geographical distribution, Arachnida, Austria, North Tyrol, Central Alps 7069.
geographical distribution, Araneae, Pakistan, Lahore 9488.
geographical distribution, Asolus semistriatus, Turkey 7989.
geographical distribution, Baetis, Philippines 7191.
geographical distribution, Balclutha, Panama 6422.
geographical distribution, Bombus, Iceland 766.
geographical distribution, Boscodus fraternus, Boscodus signanda, India 7911.
geographical distribution, Brachystola magna, Canada, Newfoundland 3160.
geographical distribution, Brahmanes ledereri, Turkey 5513.
geographical distribution, Brasiolictis bucki, Brazil 8739.
geographical distribution, British Isles, England, Cornwall Co., Ipimorpha retusa 9443.
geographical distribution, caves, Glaciavicola bathysciodes, USA, Wyoming 8702.
geographical distribution, Cerambycidae, Nepal 1609.
geographical distribution, Certontus, South America 1646.
geographical distribution, Chalcidoidea, Proctotrupoidea, Poland 9467.
geographical distribution, check lists, Hydropsychoidae, USA 8693.
geographical distribution, check lists, Limnephiloidea, USA 8695.
geographical distribution, check lists, Rhynchophoridae, USA 8694.
geographical distribution, Chrysomelidae, USA, Missouri 4740.
geographical distribution, Chrysops anthrax, Hybomitra nigella, USSR, Amur 9462.
geographical distribution, Cicindela longilabris, Canada, Prince Edward I., Canada, New Brunswick 9496.
geographical distribution, Cnecoderes mexicanus, Cephalobus macrocephalus, Bolivia 7157.
geographical distribution, Cnephisia stephaniensis, Canada 8699.
geographical distribution, Coeloxys bisoncornu, USA, East 9494.
geographical distribution, Coleoptera, Sweden 7089.
geographical distribution, Coleoptera, Sweden 7092.
geographical distribution, Coleoptera, Sweden 7092.
geographical distribution, Coleoptera, Sweden, Gotska Sanden I. 4704.
geographical distribution, Coniopyrgidae, Sri Lanka 4901.
geographical distribution, Corixidae, New Caledonia, Papua New Guinea 8800.
geographical distribution, Crete, Megacephala euphratica 2373.
geographical distribution, Culicoides, Israel 9480.
geographical distribution, Culiseta melanura, Canada, Newfoundland 6331.
geographical distribution, Curculionidae, Argentina, Morade Rubielos 5518.
geographical distribution, Cyphon phragmitellus, Hydrocyphon sexg., Iran 3978.
geographical distribution, Dasyheila oppressa, Mycetobia divergens, Canada, British Columbia 5526.
geographical distribution, Dendrolimus benderi, India 4739.
geographical distribution, Dendroster protuberans, USA, California 7121.
geographical distribution, Desmophora, Argentina, Texas 1944.
geographical distribution, Diachlorus, South America 7970.
geographical distribution, Dioryctria schuetzeella, British Isles 6306.
geographical distribution, Diptera, Czechoslovakia 3937.
geographical distribution, Diptera, Sweden 3945.
geographical distribution, Dolania, USA, Louisiana 3164.
geographical distribution, Drosophila fascipennis, Drosophila trapeziformis, Iran 7175.
geographical distribution, Drosophila unipunctata, Drosophila, Australia, Torres Strait 3953.
geographical distribution, Dryops anglicanus, British Isles, Scotland, Lurgie L. 5508.
geographical distribution, Ectobius sylvestris, USA, New York 2472.
geographical distribution, Ephemeroptera, Canada 1577.
geographical distribution, Ephemeroptera, Turkey, Iran 4006.
geographical distribution, Epuraea melanocephala, Netherlands, Voorn 6321.
geographical distribution, Eriocampa juglandis, USA, Alabama 9099.
geographical distribution, Eriometrex, Southeast Asia, New Guinea 3149.
geographical distribution, Euryurus maculatus, Euryurus cingulatus, Euryurus laevis frater, USA 4911.
geographical distribution, Frisessa sublimis, Mexico 8781.
geographical distribution, Goethena parvipennis, Bahama Is. 4744.
geographical distribution, Grapholita delineana, North America 9491.
geographical distribution, Gryllobompa dalmatica, Tetrax undulata, Switzerland 9465.
geographical distribution, Gyrynus pullatus, Sweden 7102.
geographical distribution, Haemaphysa flavipes, USA, Connecticut 8696.
geographical distribution, habitat, Spanglerogryus albiventris, USA, Alabama 5139.
geographical distribution, Heterarthrus acris, Switzerland 7095.
geographical distribution, Heteroceroc senecensis, Sweden 7090.
geographical distribution, Heteromus strebeli, Ecuador 3988.
geographical distribution, host plants, Sphecodes cyvianus, Baito, Sic 8498.
geographical distribution, host plants, phyllocoptes volae, Egypt 7103.
geographical distribution, host-parasite interactions, Catorhintha mendica, Mirabilis nyctaginea, USA, East Coast 4397.
geographical distribution, Hydrora, South America 3167.
geographical distribution, Hydronea bohemica, German Dem. Rep., Thuringia 4716.
geographical distribution, Hygloclonus lenkorana, Trichysphaera rotundata, Floria hyrcana, Brachydromus ferrugineus, Iran 851.
geographical distribution, Hyphidrys ovatus, Finland 7895.
geographical distribution, Ichneumonidae, Sweden 4724.
geographical distribution, introduced species, Delia coarctata, North America 3158.
geographical distribution, Iridomyrmex humilis, Switzerland 7091.
geographical distribution, islands, Sphecodes cyvianus, Baito, Sic 3942.
geographical distribution, Japyx solifugus, India, Poona 5521.
geographical distribution, Laricobius erichsoni, Derodontidae, British Isles 5509.
geographical distribution, larvae morphology, Ecdyonurus macani, Czechoslovakia 777.
geographical distribution, Lathrinum elongatum, Mycetoporus santicensis, Sepedophilus constans, Atheta cellaria, Switzerland 7099.
geographical distribution, Leiodes rufipennis, Leiodes gallica, Sweden 7093.
geographical distribution, Lepidoptera, Italy, Calabria 3144.
geographical distribution, Lepidoptera, Italy, Calabria 7098.
geographical distribution, Lepidoptera zosteræ, Nearctic Region 3201.
geographical distribution, Leucopis, British Isles 9442.
geographical distribution, Leucopis atriceps, Leucopis morawitzii, Leucopis ricki, Leucopis bioculata, Leucopis australis, Leucopis giraulti, Leucopis aruna, Australia 2458.
geographical distribution, Limnephilus fenestratus, Lenarchus bicornis,

New records, (continued)

- Glaucocoris propingua propingua, Limnephilus bipunctatus, Finland 8673.
geographical distribution, Liodesia serricornis, Alechara spissicornis, Grammopectus spinolae, pulior homio, Sweden 4726.
geographical distribution, Lymantria dispar, Canada, Newfoundland 8692.
geographical distribution, Matsuococcus resinosa, USA, Pennsylvania 3163.
geographical distribution, Mayetta pearsei, USA, Indiana 8701.
geographical distribution, Meconema thalassimum, USA, Rhode Island, USA, New York 8525.
geographical distribution, Melitaea deione, Heodes tytus, Iolana iolas, Plebejus argus, Cyanis semiargus, Gegenes nostradamus, Spain 7076.
geographical distribution, Metacila prunosa, Palearctic Region 4715.
geographical distribution, Microdum haldani, Microscydus minimus, Abeta laucroides, Gyrophana joyosides, Platycis minutus, Trilpha aenea, British Isles, Berkshire 6313.
geographical distribution, Microlepidoptera, Hungary 8684.
geographical distribution, Microlepidoptera, Sweden 4722.
geographical distribution, Microlepidoptera, Sweden 7085.
geographical distribution, Microsania straelen, British Isles 5510.
geographical distribution, Minus mexicanus, USA 2368.
geographical distribution, Miridae, USA, Florida 5534.
geographical distribution, Moenbia, USA, Texas, Mexico 2369.
geographical distribution, morphology, Acridomorpha, West Africa 4747.
geographical distribution, morphology, Auctus, India 7275.
geographical distribution, morphology, Gloma fuscipennis, Belgium 7892.
geographical distribution, Musca casaria, Austria 5538.
geographical distribution, Myrmecodia exilis, Nearctic Region 3151.
geographical distribution, Myrmica jost, Czechoslovakia 8737.
geographical distribution, Nalepidae, India 7141.
geographical distribution, Nelima gachia, Lacinia ephippiatus, Mitopus morio, Eure 6311.
geographical distribution, Nemobrenthus aeneipennis, Brazil 8755.
geographical distribution, Neobattella puerilis, Brazil 9499.
geographical distribution, Neophrocera flavicornis, Neophrocera lapponicus, Neophrocera scutellaris, Czechoslovakia 778.
geographical distribution, Neopodonomus similis, Bhutan 4827.
geographical distribution, new species, Axonopsis gaduamensis, Spain 13.
geographical distribution, new species, Fergusoniana szvgyi, India 4831.
geographical distribution, new species, Hungary 2441.
geographical distribution, Nycteloidia, Sweden 3946.
geographical distribution, Ochrolepis fenica, British Isles 6302.
geographical distribution, Opuscula, Platyzetidae, Czechoslovakia 2358.
geographical distribution, Opunae, Microgasterinae, Hungary 8687.
geographical distribution, Ornatidae, India, Bhutan 6346.
geographical distribution, Oxytelus 2371.
geographical distribution, Pachynotus smithae, British Isles 4034.
geographical distribution, Panamomus sulcifrons, Lophophanes lephyphantiformis, Amienus aurantius, Belgium 9483.
geographical distribution, parasites, Mimoporus, Calamagrobba, Africa 4766.
geographical distribution, parasites, Sphegnotaphus galli, Brazil 6334.
geographical distribution, parasites, Vavria culicis, Ascegorinae, Aedes polynesiensis, Tokelau Is. 9196.
geographical distribution, Pauropoda, Canada, Ontario 8691.
geographical distribution, Pauropoda, Eurypauropoda, USSR 4070.
geographical distribution, Pencillidia dufouri, Philippines 1579.
geographical distribution, Phantia ferganensis, Turkey 4735.
geographical distribution, Phlebotomus chinensis longiductus, Sergentomyia sumi, China, People's Rep., Zhejiang Province 2422.
geographical distribution, Phragmocissia albidia, Hapalus adriaticus, Greece 4731.
geographical distribution, Phryctopyga occidentalis, USA, Texas 2362.
geographical distribution, Phyllopus cardiformis, Japan, Taiwan 2359.
geographical distribution, Pilobolus confusus, Orthotylus nassus, Orthotylus vindex, Canada 4741.
geographical distribution, Plusia chryson, Sweden 7083.
geographical distribution, Plusia mandarina, Sweden, Upland 4714.
geographical distribution, Poanes yehi, USA, Kentucky 7918.
geographical distribution, Polesistis abnormis, Austria, Scheibbs Region 4729.
geographical distribution, predator-prey interactions, Nilaparvata lugens, Coccinella bilioei, Oenopora, Paederus fuscipes, Paederus melampus 3565.
geographical distribution, Pristiphora lanifica, British Isles 5512.
geographical distribution, range extension, Carabidae, Cincindellidae, Canada, Newfoundland 8700.
geographical distribution, range extension, Coelioxys bisoncornu, USA, Illinois 6327.
geographical distribution, range extension, Perizonia alchemillata, Canada, Nova Scotia 711.
geographical distribution, rare species, Microlepidoptera, Sweden 4723.
geographical distribution, Rhamphomyia nitidula, Xylophagus compedius, Dryodromia testacea, Czechoslovakia 7901.
geographical distribution, Rhodura tigrinus, North America 6332.
geographical distribution, rivers, Chironomidae, France, Pyrenees 819.
geographical distribution, Scaraphagidae, Korea 3147.
geographical distribution, Saranura pavonia, British Isles 6300.
geographical distribution, Scarabidae, Brazil 1099.
geographical distribution, Scaridae, USSR 6396.
geographical distribution, Scolitantides orion, Cupido minimus, Euphydryas defontainii, Mimas tilae, Hemaris tytus, Iberian Peninsula 7078.
geographical distribution, Scolytidae, West Indies 7167.
geographical distribution, Scolytus multistriatus, Ireland 4707.
geographical distribution, Scymnus scurialis, North America 6330.
geographical distribution, Seromyia, Sweden 7064.
geographical distribution, Sigara tadeuzii, Sigara truncatipala, Agraptocoris curyone, Papua New Guinea 4748.
geographical distribution, Siphonuliridae, USA, Southwest 7113.
geographical distribution, soil, Onbetei, India, Orissa 9487.
geographical distribution, Solenopsis invicta, Puerto Rico 4642.
geographical distribution, Sphecoecius holopodoides, USSR 9474.
geographical distribution, Sphecidae, Sweden 7087.
geographical distribution, Staphylinidae, German Dem. Rep., Potsdam, Rietzer See 4711.
geographical distribution, Staphylinidae, Maltese Is. 4746.
geographical distribution, Stigmella svenssoni, Trifurcula cryptella, Trifurcula sanoverella, Aethes diacidana, Denmark 5515.
geographical distribution, streams, Tenebrionidae, USA, Colorado 3165.
geographical distribution, Sussaba placida, Palearctic Region 4031.

New records, (continued)

- geographical distribution, Symphylla, USSR 7100.
geographical distribution, Tanytarsus coffmani, USA, North Carolina 7117.
geographical distribution, Tanytarsus, New Guinea, Australia 7884.
taxonomy, morphology, Anthomyiidae, Japan 7177.
geographical distribution, Telenomus aradi, Hungary 8685.
geographical distribution, Tenthredinidae, British Isles 7886.
geographical distribution, Tetranychidae, India 7910.
geographical distribution, Tinea columbarientia, British Isles 5511.
Trichogramma, Hawaii 8820.
geographical distribution, Tricholeiochiton, Australia 8703.
Tricholeiochiton fagesii, Tricnoides similans, geographical distribution.
Denmark, Gudena 9.
geographical distribution, Triaenoporus mesillae, USA, Illinois 5535.
geographical distribution, Tringona, South Africa 2372.
geographical distribution, Tychius crassirostris, British Isles 6303.
geographical distribution, Valgus hemipterus, USA, Michigan 1954.
geographical distribution, Xylota lunifera, Iberian Peninsula 7077.
geographical distribution, Zizeeria knysna, Malta 9468.
geographical distribution, Zygaena ephialtes, Greece 4732.
geographical distribution, 11 species, Neopulchella, Netherlands 6320.
geographical distribution, Alerius pumilus, Ethiopia 4881.
habitat, Carya nutt., Eurycoelus blanchardi 5907.
Hemiptera, Australia, Northern Territory 3208.
Hilpinus nearcticus, new species, taxonomy, Hilpinus nearcticus, USA 4811.
host plants, Achaeta janata, Arachis hypogaea 6800.
host plants, Anticarsia gemmatilis, larvae 2067.
host plants, Aphididae, Canada, British Columbia 5524.
host plants, pests, Aegyptobia oomus, Buchloe dactyloides 2066.
host plants, Physalis mammosa, Oligonychus coffeae 9151.
host plants, Tetranychus urticae, Tetranychus, India, Punjab 6804.
host-parasite interactions, Tyranus tyrannus, Tyranus verticalis, Mallophaga.
Acarna, Hippoboscidae, Canada, Manitoba, Dale Marsh 514.
hosts, Acacia decurrens, parasites, Xyleborus formicans, India, Nilgiris 2088.
hosts, Albizia falcataria, Pteroma plagiophloeus, defoliation, Moluccas 2092.
hosts, Iloxidia, Italy, Abruzzo 7105.
hosts, parasites, Halarachne baluchiana, Phoca largha, USA, Alaska 4385.
hosts, Stylioda biarticulata, Barbatella barbatellus, Nycteria latreillei.
Myos emarginatus, Nycteria schmidtii, Plecticus aurata 7903.
hosts, Tachinaephagus zealandicus parasitoids, Protocalliphora 4378.
immune response, neurological complications, man, bites, Ixodidae 8411.
infection, hosts, Entomophthora erupa, Noctua elongata, Switzerland 6609.
infection, Simulium parvius, Gastromimus, Aedes aegypti, Culex pipiens fatigans, Anophele stephensi 4209.
infestation, pests, Glycine max, Epilachna dodecastigma, Bangladesh 1247.
Kailla kowali, Empoasca dolichus, geographical distribution 33.
Laboulbeniales, parasitism, Carabidae 5990.
lesions, cuticle, abdomen, Glossina 5659.
Meroterpididae, China, People's Rep 45.
morphology, Myrmelomus, South America, USA, Florida 1709.
morphology, Rhanus elegans, Venezuela 3184.
morphology, Rhinoncus bruchoides, USA 790.
morphology, taxonomy, Acarina, India, Bihar 4765.
mutants, Culex pipiens fatigans, India, Aligarh 3904.
new species, Osmia sculleni, USA, Utah 9101.
new species, Agropyrum zaidi, Cuba 8784.
new species, Heterocleptes spinosus, Borneo 4013.
new species, Microdytes, Nepal 18.
new species, taxonomy, morphology, Trichoptera, Finland 1570.
new species, taxonomy, Rhyncaphytophidae, India 7134.
new species, taxonomy, 30 species, Trypangulium, Society Is. 831.
Nossidium pilosellum, Scandinavia 4783.
occurrence, Coleophora muscolorella, Netherlands 9478.
occurrence, damage, host plants, Orsolia, Panicum miliare 1242.
occurrence, Insecta, Eire 9454.
occurrence, Microlepidoptera, British Isles 9448.
occurrence, Nomia triangulifera, USA, Illinois 5528.
occurrence, pests, Neomeskelia bergii, Pennisetum typhoidum, India, Jodhpur 144.
occurrence, Rhinosorus brazilensis, Brazil 6502.
Palmariculus palmarum, Bahama Is. 1580.
parasites, Illanotomidae, Polygenus tripus, South America 291.
parasites, eggs, Scutellista cyanea, Parasaletia nigra, India, Maharashtra 7540.
parasites, geographical distribution, Siphonaptera, Mammalia, USA, Alaska 4743.
parasites, Insecta, Acarina, Chiroptera, USA, Michigan 7550.
parasites, Malacoptera striata, Picicola striata 4899.
parasites, Mustelidae, Rhadinopsylla pentacantha, Switzerland 5194.
parasites, Myodopsylla gentilis, Mammalia, USA, Alaska 5530.
parasites, Phoenicorhynchus ruber, Colpocephalum heterosoma, Triniton femorumum.
Anatolica phoenicorhynchus, Anatocetus pygmaeus, Spain 8336.
parasites, Spinturnix globosus, Myotis lucifugus, Canada, Alberta 5192.
parasites, Tlelomatidae, Arthropoda, India, North 8390.
parasites, Tydectides, Australia 1589.
parasites, Vanellus vanellus, Actornithophilus gracilis, Quadriceps juncus.
Saemundsonia temporalis, Spain 8334.
parasitism, Canis familiaris, Sarcoptes scabiei var hominis 7638.
parasitism, eggs, Psychoneura, Rhopalum clavipes, Canada, Ontario 4377.
parasitism, Hemiptera, Graphognathus leucoloma, Australia 2902.
parasitism, hosts, Hyalomys triangulifer, Glischruchilus fasciatus 6760.
parasitism, Trichoboscopia epeori, Rhythrogena iridina 5232.
parasitoids, Aphididae, India 7213.
Pasties, Japan 2445.
pathogens, characterization, rikettsia-like disease, Scotogramma trifolii 8169.
pathogens, Coelomonax, Aedes cinereus, Sweden 8139.
pathogens, Entomophthora, Insecta, Finland 5721.
Pentaloniastax nacoaleae, parasites, Parotis veruminalis, India, Kerala 2031.
pest outbreaks, Deudorix epixarbes, India, Kashmir 3000.
pest outbreaks, Dysdercus clathratus, India, Meghalaya 7691.
pest outbreaks, Mononychiellus tanajou, Nigeria 3771.
pest outbreaks, pest control, Troglodema granarium, USA 3768.
pest outbreaks, Psidium guajava, Metastasis recta, India, Punjab 7738.
pest outbreaks, Stenochroia elongella, Zea mays, India, Meghalaya 7689.
pests, attack, host plants, Schizotetranychus, Crotalaria speculabilis 7675.
pests, Bemisia hancocki, Laurus nobilis, British Isles 2977.
pests, infestation, Citrus, Othresis fulonica, Othresis materna, India, Punjab

New records, (continued)

7790.
pests, seeds, Zea mays, Caloglyphus krameri, Parasitus consanguineus, Prodnichyus, India, Punjab 7735.
Planococcus lilacinus, Guyana 1580.
predation, intertidal environment, Nematoda, Staphylinus ater, British Isles, Scotland, Ythan Estuary 8362.
predation, Scurius carolinensis, pupae, Anthera polyphemus, Attacus atlas, USA, Wisconsin 5265.
predators, pests, Spodoptera litura, Araneae, India, Andhra Pradesh 1439.
Pseudococcus microdonidum, Seychelles 1580.
range extension, Apis mellifera adansonii, Panama, Darien, Santa Fe 5537.
range extension, Chelostoma compansularum, Chelostoma fuliginosum, USA, New York 2365.
range extension, geographical distribution, Acanalonia conica, USA, Northeast 2367.
range extension, geographical distribution, Boreothrinax maculipennis, Pyrgota undata, USA, Mississippi 2366.
rare species, Dorytomus salicinus, British Isles, England, Cumbria 6298.
rare species, geographical distribution, Macrolepidoptera, Sweden 7086.
rare species, Orthetrum brunneum, Austria, North Tyrol 7070.
repopulation, Nomia triangulifera, USA, Illinois 9497.
repopulation, Xeromelitta interrupta, USA, Illinois, Henderson Co. 9493.
sexual dimorphism, Willowsia jacobsoni, Puerto Rico 1619.
Skwala brevis, Japan 3860.
species composition, Lepidoptera, British Isles, England, Yorkshire 9450.
species composition, surveys, Coccidae, Puerto Rico 3951.
Spodini, Nepal 808.
Stegana shirozui, India 784.
surveys, Aphididae, India 7110.
surveys, Aphididae, Poland 787.
taxonomy, morphology, Naphiellus, India 7194.
taxonomy, morphology, Neopelia, India 7240.
Tetranychidae, geographical distribution, India, Punjab 7912.
Trichoptera, USA, Ohio 3150.
virus-like particles, nuclei, Amyelopsis transitella 5739.
New South Wales.
taxonomy, morphology, Thalaina, Thalainodes, Macqueenia, new species, Thalaina kimba 3222.
New species.
abundance, geographical distribution, sympatry, Nanorchestes antarticus, Nanorchestes bellus, Nanorchestes laiae, Nanorchestes breckinistae, Antarctica, Victoria Land 4703.
Aegialia wittmeri, taxonomy, morphology, Nepal 21.
Anthicidae, West Indies 1612.
Antoinella gignis, Morocco, Laemostenus peloponnesicus, Laemostenus thessalicus, Greece, Troglodanum novaeiberniae, Papua New Guinea 4814.
Asilidae, India 4001.
association, crop flies, Tetranychidae, India 8716.
Caladonius, South America, Amazon R. 4838.
Cerambycidae, Nepal 1609.
Cleradini, Australia 3210.
Cosmetolaelaps, symbionts, morphology, Onthophagus 800.
description, Acari, Papua New Guinea 6.
Dichorompha sapodilla, Dichorompha manilkara, USA, Florida 1660.
Draconotus, Ivory Coast 3190.
ecological distribution, Ixodes matoji, Zimbabwe 12.
geographical distribution, biogeography, Labidostomidae vialae, Labidostomidae corsicum, Corsica 4454.
geographical distribution, biogeography, morphology, Corsica 4454.
geographical distribution, Laccobius 805.
geographical distribution, morphology, Certoporus, South America 1646.
geographical distribution, Nanorchestes, Antarctica, Victoria Land 8722.
geographical distribution, surveys, Brachycera, Czechoslovakia 2356.
Hemiptera, Australia, Northern Territory 3208.
host plants, Chalcididae, morphology, Mascarene Is., Reunion I. 4877.
hosts, new records, parasitoids, Tachinaephagus zealandicus, Protocalliphora 4378.
house dust, Dermatophagoides siboney, Cuba 3970.
Idiomyscus simus, Aethomyces viridus, Cytomyia perisema, Cuneiceps insularis, Mascarenes 4864.
infection, parasites, Nosema hyobii, Hyalomys abietis 8131.
Leucobenga rimbicana, Nesiodrosophila pleurostria, India 784.
Liudonemus curticaudatus, Endonemus illiesi, Habrotydes perardens, Anisopteromalus glaber, Hungary, Germany, Fed. Rep. 37.
Mezira smithi, Aradus dentatus, USA, Georgia, Philippines 8810.
morphology, Acanthoscelides compus, Acanthoscelides caracale, Argentina 3186.
morphology, Arthromelus rossii, Kenya 1605.
morphology, Blatella ashahini, Okinawa 804.
morphology, Calamomyia alterniflorae, North America 3204.
morphology, Calyptera, China, People's Rep. 3197.
morphology, Carlepinus graciliformis 14.
morphology, cases, Lestrimelitta guyanensis, Trigona savannensis, French Guiana 3220.
morphology, Catantopinae, China, People's Rep. 847.
morphology, Ceratopogonidae, China, People's Rep. 1575.
morphology, Corixa tibialis 1653.
morphology, Desmophis apicomis, Adinopsis cuspidata, Adinopsis pubescens 3181.
morphology, developmental stages, Monostera 1636.
morphology, Dicrodiplosis manihoti, Africa 1624.
morphology, Dixella nixiae, Honduras 29.
morphology, ecological distribution, Himalotrechodes insignis, Nepal 17.
morphology, Encicospilus watsami, Encicospilus polems, Africa 3219.
morphology, Franklinella keliae 1677.
morphology, Frontopsylla tulienensis, China, People's Rep. 44.
morphology, geographical distribution, Archilestes lataluata, Central America 1666.
Woodwardiognis gracilis, Australia 825.
morphology, geographical distribution, Basilobella parrata, Japan 8.
morphology, geographical distribution, Caenis candida, Canada 1577.
morphology, geographical distribution, ecological distribution, Dacus opilae, Australia 821.
morphology, geographical distribution, Oribolates tianshanicus, USSR 16.
morphology, geographical distribution, Peromelidae, Asia 35.
morphology, geographical distribution, Staphylinidae, New Guinea 2398

Subject Index

New species, (continued)

- morphology, *Ghiliellana*, Panama 1634.
 morphology, *Goniozus collessi*, *Goniozus mandibulatus*, *Goniozus jacintae*, Australia 833.
 morphology, *Hydroperla phormidia*, Nearctic Region 1673.
 morphology, *Hypogastrura punctata*, USA, Pennsylvania 3136.
 morphology, *Ischnopygus shansienensis*, China, People's Rep. 43.
 morphology, *Kermes isellii*, *Kermes prinus* 1638.
 morphology, *Lygaeosoma*, China, People's Rep. 824.
 morphology, *Mesaphorura hylaphila*, *Mesaphorura jarmilae*, *Mesaphorura jirii* 8778.
 morphology, *Mesostigmata*, Nigeria 1588.
 morphology, *Metaselenia* 838.
 morphology, morphology. *Pseudoschoengastia dispergus*, parasites, hosts, *Heteromys demarestianus* 1590.
 morphology, *Neobius apuanicus*, Italy 1594.
 morphology, *Neonarchistes pelosanguis*, *Neonarchistes ammonitioris*, USA, Texas, Padre I. 2381.
 morphology, *Nupedia plicatura*, China, People's Rep. 813.
 morphology, *Olethreutinae*, Madagascar 843.
 morphology, *Ophtomyia pueranovi*, *Amauromyia belamcandae*, *Phytomyia basegawai*, 2419.
 morphology (organism), taxonomy, *Edwardina confusa*, Australia, New South Wales 3193.
 morphology, *Ozophora parapicta*, South America 2370.
 morphology, parasites, *Apelinius procipilli*, *Prochilus fraxinifolii*, USA, Iowa 39.
 morphology, parasites, *Promuchella lukoschui*, *Mammalia* 92.
 morphology, *Phenacoccus berteri* 1194.
 morphology, *Phlebotomus rousetti*, South Africa 1627.
 morphology, *Psyllaphagus*, Africa 1649.
 morphology, *Rhabdypis* 3218.
 morphology, *Rhorus bartelli*, *Rhorus gaspianus*, *Hyperbatus marmoratus* 1650.
 morphology, *Sarcophagidae*, China, People's Rep. 24.
 morphology, *Scopaeus fageli*, *Scopaeus girardi*, Ivory coast 1603.
 morphology, *Setis*, *Formosa* 1610.
 morphology, taxonomy, *Alcestis*, Brazil 3214.
 morphology, taxonomy, *Alienates* 2433.
 morphology, taxonomy, *Amblyseius nambourensis*, *Amblyseius fletcheri*, Australia 799.
 morphology, taxonomy, *Amphinemura albafrascata*, *Amphinemura lebezi*, *Plecoptera* 3231.
 morphology, taxonomy, *Anarsia aschraella*, India 2465.
 morphology, taxonomy, *Anotoglyphus tunisensis*, Tunisia 2385.
 morphology, taxonomy, *Bracconidae*, Tunisia 2449.
 morphology, taxonomy, *Cricotopus zavrela* 2424.
 morphology, taxonomy, *Culicoides*, Panama 3205.
 morphology, taxonomy, *Damascarga*, Madagascar 3209.
 morphology, taxonomy, *Drosophila fima* 1628.
 morphology, taxonomy, *Drosophila moana*, Australia, Torres Strait 3953.
 morphology, taxonomy, *Frankliniella gergeri*, USA, Georgia 3233.
 morphology, taxonomy, *Griotopus tartarus*, *Griotopus stellatus*, Nepal 807.
 morphology, taxonomy, *Hastella*, Australia 2473.
 morphology, taxonomy, *Hypogococcus pungens*, Argentina 1639.
 morphology, taxonomy, *Inveia*, USA, Texas 3221.
 morphology, taxonomy, *Lissocephala*, Ivory Coast 1626.
 morphology, taxonomy, *Macduinnoa brunnea*, USA, Florida 3207.
 morphology, taxonomy, *Megaselia carola*, *Megaselia lanata*, *Megaselia rotunda*, *Megaselia unguata*, North America 2415.
 morphology, taxonomy, *Mycomya goethalsi*, Panama 1625.
 morphology, taxonomy, *Nemoura klapperichii*, China, People's Rep. 3230.
 morphology, taxonomy, *Neomachilocha spiraea*, USA, Florida 2464.
 morphology, taxonomy, *Pests*, *Megaelia sandhu*, India 823.
 morphology, taxonomy, *Phaenella suspecta*, North America 3203.
 morphology, taxonomy, *Sergentomyia burkensis*, China, People's Rep. Szechuan Province 2422.
 morphology, taxonomy, *Sesoplex californicus*, North America 2453.
 morphology, taxonomy, *Sukunahukona popei*, India 3180.
 morphology, taxonomy, *Trichogramma evanescens* 2455.
 morphology, taxonomy, *Trietacus abietivagrus*, *Eriophyes chibaensis*, Japan 3170.
 morphology, taxonomy, *Tucanais podagrus* 2382.
 morphology, taxonomy, types, *Salicidae* 8734.
 morphology, taxonomy, *Vagha blacoi*, India 2380.
 morphology, taxonomy, 12 species, *Atherigona*, India 822.
 morphology, taxonomy, 2 species, *Actinochaeta*, India 822.
 morphology, taxonomy, 3 species, *Cemus*, China, People's Rep. 2443.
 morphology, *Tungidae*, Africa 1633.
 morphology, *Tjederia brevicornis*, Africa 1665.
 morphology, *Toxorhynchites changbaensis*, China, People's Rep. 25.
 morphology, *Trioxa trigona* 2438.
 morphology, *Waichia tiangwangshanensis*, China, People's Rep. 7.
 morphology, *weiss*, *Tetragnatha bonnensis*, Japan, Bonin Islands 1593.
 new genera, *Coryphura squilosa*, *Soyuzn America*, Amazon R. 3206.
 new genera, *fossils*, *Schleieria ceramensis*, France 1623.
 new genera, geographical distribution, *Pocillocoelus longilobus*, Australia 827.
 new genera, *Margadorea desmieri*, Ivory Coast 1791.
 new genera, morphology, *Leptoparia papillata* 1598.
 new genera, *Murphyella aequilula*, *Timahochus paulus*, Singapore 8802.
 new genera, *Notoxentia*, Africa 4030.
 new genera, taxonomy, *Cryptarthria pseudovalis* 41.
 new genera, taxonomy, *Hebridae* 4860.
 new genera, taxonomy, *Maniophyter carabacua*, USA, Texas 5604.
 new genera, taxonomy, morphology, *Aekaniella koponeni*, USSR, Abkhazia 6429.
 new genera, taxonomy, morphology, *Annamphorus thumetocostae*, Brazil 8741.
 new genera, taxonomy, morphology, *Ceraletes proboscis*, Brazil 8739.
 new genera, taxonomy, morphology, *Gastrophys clare*, Brazil, Sao Paulo 6353.
 new genera, taxonomy, morphology, *Hadhizibella physococci*, USSR, Georgia 6440.
 new genera, taxonomy, morphology, *Misotrurus mendocinus*, Brazil 6354.
 new genera, taxonomy, morphology, *Oncinocampa falceps*, Spain, Santander, Treviso 4824.
 new genera, taxonomy, morphology, *Trichalindon penicillum*, Venezuela 4780.
 new genera, taxonomy, *Trypanophellus necopinus* 7167.
 new records, *Agromyzidae*, Cuba 8784.
 new records, *Axonopsis quadramantensis*, Spain 13.
 new records, *Culicoides*, Israel 9480.
 new records, *Microdites*, Nepal 18.
 new species 2427.

New species, (continued)

- Nymphes*, *Myodactylus*, Australia 3227.
 parasites, *Actinocephalus ellipsoidus*, *Ischnura delicata* 2627.
 parasites, birds, *Ereynetidae*, USA, Hawaii 795.
 parasites, *Eadia neurotrichus*, *Neurotrichus gibbsii* 796.
 parasites, host plants, *Eurytoma* 4878.
 parasites, hosts, *Torilimbica kirchocephalus*, *Pischoi kirchocephalus*, New Guinea 3968.
 parasites, *Iguanacarus alexandri* 9.
 parasites, isolation, *Ramulococcus olivaceus*, *Ceriatigra olivaceus* 2628.
 parasites, *Monitus*, *Chiroptera*, South America 10.
 parasites, *Nassaliae boronensis* 11.
 parasites, *Nosera calcarata*, *Phytophaga calcarata* 9002.
 parasites, *Sermundsonia baken*, *Quadriceps adustus*, *Haemaphysoidae* 516.
 parasites, *Stemmatostyles primus*, *Antonia grammis*, South Africa 2029.
 parasites, taxonomy, morphology, *Tydetodes*, Australia 1589.
 parasites, *Tegopolus spondulius*, *Tegopolus vixius*, India, West Bengal 3969.
 parasites, *Termitaria*, *Isopora*, Australia 9005.
 parasites, *Trombiculidae*, *Rousetus amplexicaudatus*, *Rallus torquatus*, *Philippines* 394.
 parasites, *Whartonia kulamadouensis*, *Dobsonia moluccensis*, Iran Jaya 797.
 parasites, *Whartonia kulamadouensis*, *Dobsonia panamensis*, Papua New Guinea 797.
 parasitoids, taxonomy, *Apididae*, India 7213.
Pernconidia ramadei, France, Madi-Pyrenes 817.
 reclassification, taxonomy, revision, *Myrmecogaster* 6437.
Serronyia beveli, *Serronyia maculipennis*, *Serronyia punctata*, Sri Lanka 7964.
 7 species, taxonomy, morphology, *Brachyanax* 7189.
Spodtrini, *Pristiocyclus martensi*, *Laemostenus pseudobrunneus*, *Laemostenus modestus*, Nepal 808.
Staphylinidae, Iran, Jordan, Afghanistan, Yemen 3187.
Strongylophthalmyia stackelbergi, USSR 27.
 surveys, *Apididae*, India 7110.
 taxonomy, morphology, 47 species, *Malachididae*, Asia, Himalayan Mts 7944.
 taxonomy, revision, keys, *Hylaeus* 4022.
 taxonomy, revision, *Limosina* 2417.
 taxonomy, revision, morphology, *Alloleucisina* 4886.
 taxonomy, revision, morphology, *Anthaxia berbera* 8748.
 taxonomy, revision, morphology, *Euschistus maculipennis* 5583.
 taxonomy, revision, morphology, *Frenchia bankiae* 3216.
 taxonomy, revision, morphology, *Xestia*, North America 40.
 taxonomy, revision, *Pseudostegana* 8787.
 taxonomy, revision, *Stenodynerus* 8832.
 taxonomy, revision, systematics, 10 species, *Metacilis* 2460.
 taxonomy, *Ambostriane*, Australia 8819.
 taxonomy, aquatic animals, *Dytiscidae*, Brazil 809.
 taxonomy, *Arborechthonius stylosotus*, Canada, Ontario 5546.
 taxonomy, Asia, host preferences 783.
 taxonomy, biogeography, *Rhagmatophila ausseus* 4048.
 taxonomy, bionomics, *Ptyophthorus pinapo*, Spain 8763.
 taxonomy, geographical distribution, *Coleoptera*, West Indies 806.
 taxonomy, geographical distribution, marine environment, *Agave verrucosa*, *Agave hirtellus* 396.
 taxonomy, *Hydora annexens*, *Hydora lensa*, geographical distribution, new records, South America 3167.
 taxonomy, keys, *Mordellistenechroa* 8749.
 taxonomy, *Leptopneudea*, South America 5575.
 taxonomy, morphology, *Acampocladius reissi* 4828.
 taxonomy, morphology, *Acanthomytilus hungaricus*, Hungary 2441.
 taxonomy, morphology, *Acanthophthirus capaci*, Turkey 5545.
 taxonomy, morphology, *Acanthoscelides devriesi*, *Acanthoscelides pigricola*, *Acanthoscelides zebratus* 7162.
 taxonomy, morphology, *Achryson peracchi*, *Achryson meridionale*, Brazil 6362.
 taxonomy, morphology, *Acropolytoma mesae*, *Acropolytoma miamienae*, *Acropolytoma* 2457.
 taxonomy, morphology, *Acropolytoma immutabilis*, North America 2457.
 taxonomy, morphology, *Acnema* 8794.
 taxonomy, morphology, *Adamystis conense*, Pakistan 2150.
 taxonomy, morphology, *Aedes kesseli*, Tonga 6406.
 taxonomy, morphology, *Aesalis manshui*, Taiwan 8776.
 taxonomy, morphology, *Aeshna moori*, Zambia 7236.
 taxonomy, morphology, *Afronius subflavus*, *Ephemerythus dissimilimus*, *Caenomedes magnipalpis*, *Caenomedes inflex*, Zaire 6413.
 taxonomy, morphology, *Afrophiolus aelium*, Kenya, Tanzania 7246.
 taxonomy, morphology, *Afrotrichobulba gabonica*, *Afrotrichobulba vauvreti*, *Trombiculidae*, Gabon 798.
 taxonomy, morphology, *Agabus apache*, USA, Arizona 4799.
 taxonomy, morphology, *Agatocera sokolovi*, Vietnam 6383.
 taxonomy, morphology, *Agramma reticulatum*, Gambia, Senegal 4012.
 taxonomy, morphology, *Alaheus haitiensis*, Haiti 4853.
 taxonomy, morphology, *Alaheus haitiensis*, Haiti 8799.
 taxonomy, morphology, *Albanoglossus martensi*, *Diplopoda*, Iran 851.
 taxonomy, morphology, *Aleurodiporus americanus* 2456.
 taxonomy, morphology, *Allopauporus fellbergii*, *Allopauporus scythellus*, *Allopauporus rubicundus*, *Allopauporus extenuatus*, *Allopauporus quadridentatus*, *Allopauporus aculeatus*, *Allopauporus propius*, *Allopauporus clavistylus*, *Scythellus* 7245.
 taxonomy, morphology, *Altaudomyia fuscitarsis*, *Stilobezzia enistyla*, India 4000.
 taxonomy, morphology, *Altaudomyia variegata*, USA, Southeast 7968.
 taxonomy, morphology, *Althecae*, China, People's Rep. 6322.
 taxonomy, morphology, *Altica*, India 7160.
 taxonomy, morphology, *Amaphysa aporema*, Brazil, Amapa 4854.
 taxonomy, morphology, *Amblyseius alpicola*, *Amblyseius liturivorus*, Japan, Honshu 7135.
 taxonomy, morphology, *Amblyseius ehari*, Asia 8725.
 taxonomy, morphology, *Anagrus albivestris*, USA, West 6442.
 taxonomy, morphology, *Anagrus abdi rassouli*, Iraq 6434.
 taxonomy, morphology, *Anapleus jelineki*, *Anapleus weiwalki* 8753.
 taxonomy, morphology, *Anastrepha reichardt*, Venezuela, *Anastrepha tecta*, Peru 8790.
 taxonomy, morphology, *Anchylorhynchus bicarinatus* 1614.
 taxonomy, morphology, *Androlaelaps capromydis*, *Ornithonyssus garrioidi*, Cuba 8720.
 taxonomy, morphology, *Anisiera ferracui*, *Phylloptera verrucosa*, *Parosora maculifera*, Italy 6455.
 taxonomy, morphology, *Anisops ayseri*, Australia, Northern Territory 5580.
 taxonomy, morphology, *Anister hintoni* 6366.
 taxonomy, morphology, *Annececterus brunneus*, South Africa 8801.

New species, (continued)

- taxonomy, morphology, *Anomalobalcanis litoralis*, USA, *Halacaroides angustus*, *Halacaroides breviculatus*, Chile, Straits of Magellan 7147.
 taxonomy, morphology, *Antennus boguesi*, Mexico, Socorro Island 1607.
 taxonomy, morphology, *Anthaxia aradina*, *Anthaxia brodskyi*, Crete 8760.
 taxonomy, morphology, *Anthidium berbericum*, *Royanthidium bicoloripes*, Morocco 7210.
 taxonomy, morphology, *Anthoctopes glycosis*, *Cosella ichnocraspia*, *Episcaphophyes cleroendris*, India 7138.
 taxonomy, morphology, *Antipodidae*, Africa, Madagascar, Philippines, Brazil 7942.
 taxonomy, morphology, *Anupana himalayensis*, India 7208.
 taxonomy, morphology, *Aphanosoma hungaricum*, Hungary 7967.
 taxonomy, morphology, *Aphodius murensis*, *Aphodius khandu*, *Aphodius pokharensis*, Nepal, Himalayas 20.
 taxonomy, morphology, *Aponychus shanienicus*, China, People's Rep. 3972.
 taxonomy, morphology, *Aradidae*, Central America 7978.
 taxonomy, morphology, *Aradidae*, China, People's Rep. 4008.
 taxonomy, morphology, *Aradidae*, Mexico 31.
 taxonomy, morphology, *Archethraulodes spatulus*, *Rhigotopus andanensis*, *Secochela ulissi*, South America 7976.
 taxonomy, morphology, *Archipscopus perplexus*, Angola 848.
 taxonomy, morphology, *Argyresthia sorbella*, *Epinota brunichiana*, *Crambus enicellus*, *Thera albougaria*, Hungary 7995.
 taxonomy, morphology, *Ardeus sinensis*, China, People's Rep. 4023.
 taxonomy, morphology, *Armonium hobelandi*, Zaire 4011.
 taxonomy, morphology, *Arrenurus*, India 2378.
 taxonomy, morphology, *Ascalaphidae*, Brazil, Amazon Basin 4056.
 taxonomy, morphology, *Aschoeschengia danieli*, USA, Russia 7146.
 taxonomy, morphology, *Asilidae*, India 7184.
 taxonomy, morphology, *Asioscopus meridionalis*, Spain, *Cacellus ambulus*, *Mesopscopus lustratus*, Portugal, *Cacellus arundinis*, *Lachesila dimorpha*, *Mesopscopus graecus*, Greece 8003.
 taxonomy, morphology, *Asolcus lodosi*, *Telenomus turicus*, Turkey 7989.
 taxonomy, morphology, *asterolecanium* group, 26 species, *Metaphycus*, South Africa 4874.
 taxonomy, morphology, *Athengona*, Africa 5567.
 taxonomy, morphology, *Atheta chaetostoma*, Sweden 4777.
 taxonomy, morphology, *Atolus khazariani*, USSR, Armenia 8766.
 taxonomy, morphology, *Atlantemites guianini*, *Atlantemites ibitinguara*, Brazil 8836.
 taxonomy, morphology, *Atractomorpha*, China, People's Rep. 2475.
 taxonomy, morphology, *Austrocerella columbae*, Australia, Tasmania 2476.
 taxonomy, morphology, *Austroestes mendeibii*, Australia 826.
 taxonomy, morphology, *Automeris louisiana*, USA, Louisiana 7228.
 taxonomy, morphology, *Bactriola minuscula*, *Hebestola brasiliensis*, *Pseudoglossola reichardt*, Brazil 6363.
 taxonomy, morphology, *Baeocercidium*, Sulawesi 5555.
 taxonomy, morphology, *Baens chantaensis*, USSR, Kazakhstan 7190.
 taxonomy, morphology, *Bakerdania kielczewskii*, *Petalomum raclei*, *Impantes conatsumilis*, *Impantes parapoculensis*, *Scuticarus myrmecophilus*, *Scuticarus ovodeosimilis*, Poland 4761.
 taxonomy, morphology, *Bakerus amazonicus*, *Bakerus maculatus*, South America, Amazon R. Basin 4862.
 taxonomy, morphology, *Baklutha wolida*, Panama 6422.
 taxonomy, morphology, *Banasa rostrata*, *Banasa tumidifrons* 6418.
 taxonomy, morphology, *Baracheta caucasica*, USSR, Caucasus Mts 6397.
 taxonomy, morphology, *Baratus hartmanni*, Panama 7950.
 taxonomy, morphology, *Baryconus dudichi*, Philippines, *Baryconus gallego*, Costa Rica 7986.
 taxonomy, morphology, *Batrachomorpha*, Africa 4865.
 taxonomy, morphology, *Beetulus taotai* 7955.
 taxonomy, morphology, *Belotus acutipennis*, *Belotus maculatus platonensis*, Brazil 6370.
 taxonomy, morphology, *Bembix inyoensis*, USA, California 6431.
 taxonomy, morphology, *Benbowia elisabethae*, Sumatra 4042.
 taxonomy, morphology, *biogeography*, *Paraclemensia* 4898.
 taxonomy, morphology, *Bocharia shirleyanae*, USA, Texas 3171.
 taxonomy, morphology, *Bombylius californicus*, *Bombylius halii*, *Bombylius yucatanicus* 1622.
 taxonomy, morphology, *Brachylobyga decorata*, Sulawesi 8811.
 taxonomy, morphology, *Brachypogon kraussi*, *Brachypogon lokunagai*, *Dasyhelea forsteri*, Solomon Is 7176.
 taxonomy, morphology, *Brasiliarius glaberrimus*, *Brasiliarius intermedius*, Brazil, *Brasiliarius fraterculus*, Paraguay 8752.
 taxonomy, morphology, *Brueelia* 6649.
 taxonomy, morphology, *Caledonia* 810.
 taxonomy, morphology, *Caledonomorpha papuana*, New Guinea 4806.
 taxonomy, morphology, *Callimetopoides albomaculatus*, Sri Lanka 3182.
 taxonomy, morphology, *Campephilocoptes ateyei*, *Campephilocoptes paraguayensis*, South America 7144.
 taxonomy, morphology, *Carabidius andreas*, Australia, Victoria 2405.
 taxonomy, morphology, *Carabidae*, Asia 3984.
 taxonomy, morphology, *Carabidae*, Nepal 4798.
 taxonomy, morphology, *Carcinophoridae*, Ecuador 5563.
 taxonomy, morphology, *Carinophloeus zairensis*, Zaire 8767.
 taxonomy, morphology, *Caryocolum*, Europe 4887.
 taxonomy, morphology, *Cataglyphis sabulosa*, Israel 8831.
 taxonomy, morphology, *Cataglyphis mahunkorum*, *Parajapyx alienus*, West Indies, San Lucia 4823.
 taxonomy, morphology, *Centruroides platnicki*, Bahamas Is. 8744.
 taxonomy, morphology, *Cephaeta hayati*, India 2462.
 taxonomy, morphology, *Ceraledrodium duciei*, Brazil 4015.
 taxonomy, morphology, *Ceratopogonidae*, South Africa, Transvaal 8796.
 taxonomy, morphology, *Cervicornis brevisioris*, Nepal 7979.
 taxonomy, morphology, *Chaetostrechia procera*, Japan, Shikoku I. 4818.
 taxonomy, morphology, *Chaioborus diversicostus*, Poland 8815.
 taxonomy, morphology, *Charotys* 6365.
 taxonomy, morphology, *Chauliops horizontalis*, China, People's Rep. 4009.
 taxonomy, morphology, *Chazara rangontavica*, USSR, Tadzhikistan 7234.
 taxonomy, morphology, *Chionanthobius darlingtoni*, Cuba 1606.
 taxonomy, morphology, *Chirodrips strupei*, *Apterygotrips gilvipes*, Azores, Canary Islands 849.
 taxonomy, morphology, *Chloebius azumeli*, *Macrotrabus polylineatus*, Sibinia karakumica, *Apion amudariense*, USSR, UdSSR 4795.
 taxonomy, morphology, *Chorinaeus rhenanus* 1648.
 taxonomy, morphology, *Chrysomalia tobiasi*, USSR, Uzbekistan 6428.

New species, (continued)

- taxonomy, morphology, *Chudalupa meridionalis*, Australia, Western Australia 2379.
 taxonomy, morphology, *Cicadellidae*, South America 7982.
 taxonomy, morphology, *Cicindela archinoides*, Australia 4804.
 taxonomy, morphology, *Cinara chaetostrepta*, India, Simla 1642.
 taxonomy, morphology, *Cinominus* 1597.
 taxonomy, morphology, *Clarocia crassula*, *Strongylophthalmya raricornis*, USSR 6395.
 taxonomy, morphology, *Claudiavina miranda*, *Monelata incisipennis*, Basalys, 6 species, India, Sri Lanka 4883.
 taxonomy, morphology, *Claveliocenerus beaumonti*, USSR, Turkmenistan 8823.
 taxonomy, morphology, *Clytrinae*, Nearctic Region, Neotropical Region 7945.
 taxonomy, morphology, *Coccus elatensis*, Israel 2442.
 taxonomy, morphology, *Cochlochila* 8803.
 taxonomy, morphology, *Coenosia subflavicornis*, China, People's Rep. 2411.
 taxonomy, morphology, *Colaspis chapalensis*, Mexico, Jalisco 8769.
 taxonomy, morphology, collections, *Graphitarsus surindicus*, *Chalcidontus lawrencei* 7242.
 taxonomy, morphology, color, *Bourletia gibbosa*, USA, South Carolina 1620.
 taxonomy, morphology, *Coloradoa velde*, USA, California, San Bernardino Mts. 6447.
 taxonomy, morphology, *Compsoecus deceptor*, *Paromoeocerus sticticonus*, Brazil 6364.
 taxonomy, morphology, *Compteromera oconeensis*, USA, South Carolina 3194.
 taxonomy, morphology, *Crocroce parva*, Africa, South 4900.
 taxonomy, morphology, *Coniopteryx ceylonica*, *Coniopteryx latistylis*, Sri Lanka 4901.
 taxonomy, morphology, *Conotelus ocellatus*, *Conotelus yayasi* 8750.
 taxonomy, morphology, *Copidognathus*, Argentine Basin 8718.
 taxonomy, morphology, *Croceitarsonus bifidus* 1581.
 taxonomy, morphology, *Corillida lena*, Peru 8806.
 taxonomy, morphology, *Corixa iberica*, Spain, Portugal 5576.
 taxonomy, morphology, *Crotopha seeveri*, Brazil 6377.
 taxonomy, morphology, *Coscioptera panochensis*, USA, California 6384.
 taxonomy, morphology, *Cosmochthonius bhutanensis*, India, Bhutan 6346.
 taxonomy, morphology, *Costa Rica*, *Epilampra involucris*, *Epilampra belli*, *Epilampra unistata*, *Epilampra rothi* 2471.
 taxonomy, morphology, courtship, *Epicauda brasilia*, *Epicauda crucera* 2496.
 taxonomy, morphology, *Cricotopus zavrelli*, Poland 4837.
 taxonomy, morphology, *Croesus persicus*, Iran 6438.
 taxonomy, morphology, *Crossocerus distinguendus*, British Isles 5593.
 taxonomy, morphology, *Cryptorhynchus minchami*, Australia, South Australia 2673.
 taxonomy, morphology, *Cryptoxilos lymanoti* 2451.
 taxonomy, morphology, *Culex tiapingsensis*, China, People's Rep., Tianpingshan 2423.
 taxonomy, morphology, *Culicoides*, Colombia 812.
 taxonomy, morphology, *Culicoides schramae*, *Culicoides krombeini*, Sri Lanka 2413.
 taxonomy, morphology, *Culicoides*, South America 4844.
 taxonomy, morphology, *Curculionidae*, *Rhynchophoridae*, Ogasawara Is. 3979.
 taxonomy, morphology, *Cydia largo* 7224.
 taxonomy, morphology, *Cyphon simplex*, Iran 3978.
 taxonomy, morphology, *Dactyloscirus palatiputrensis*, India, Bihar 4765.
 taxonomy, morphology, *Deinophloeus sheliae*, *Deinophloeus hirsutus* 4800.
 taxonomy, morphology, *Delia*, China, People's Rep. 820.
 taxonomy, morphology, *Deltocephalinae*, South America 5587.
 taxonomy, morphology, *Deltoesthus scutellus*, Mexico 3980.
 taxonomy, morphology, *Demodes* 7140.
 taxonomy, morphology, *Denismieria martyni*, Borneo 23.
 taxonomy, morphology, *Depressaria nemolella*, *Pseudatemelia eliae*, *Mompha complexa*, *Trifurcula rodella*, Europe 7997.
 taxonomy, morphology, *Dermaptera* 2406.
 taxonomy, morphology, *Derovatellus hancocki* 1615.
 taxonomy, morphology, *Derovatellus hancocki*, Uganda 4781.
 taxonomy, morphology, *Derovatellus oneri*, Congo, People's Rep. 7163.
 taxonomy, morphology, *Desmopachria leechi*, USA, Florida 4791.
 taxonomy, morphology, *Deuterophbia sajania*, Mongolia 1629.
 taxonomy, morphology, *Diapterobius crinitus*, *Paracateroppia meridionalis*, USSR 6341.
 taxonomy, morphology, *Dichelachia adusta*, *Dichelachia flavicosta* 3202.
 taxonomy, morphology, *Dicranocentrus*, Nepal 6387.
 taxonomy, morphology, *Dicranota flammata*, *Dicranota candelisequa*, Europe 6403.
 taxonomy, morphology, *Dicyrtoma christinae*, Poland 8780.
 taxonomy, morphology, *Dilardiidae*, Brazil, Amazon Basin 4055.
 taxonomy, morphology, *Dilophus maghrebenis*, North Africa 4836.
 taxonomy, morphology, *Dilophus neglectus*, Europe 7182.
 taxonomy, morphology, *Diplazon heinrichi*, *Susaba birzi* 4031.
 taxonomy, morphology, *Diploschizia*, North Africa 1659.
 taxonomy, morphology, *Diptilorynchus sinuatus*, *Rhynchaptispterus shorecola*, India, West Bengal 8714.
 taxonomy, morphology, *Dirhininae*, India 7212.
 taxonomy, morphology, *Dirla pulleni*, New Guinea 4910.
 taxonomy, morphology, *Discophora dolens*, Philippines, Negros I. 4889.
 taxonomy, morphology, *Dixa pseudindiana*, USA, Minnesota 2416.
 taxonomy, morphology, *Donicicopus bicandatus*, Canada, Northwest Territories 4826.
 taxonomy, morphology, *Drosophila brahmagiriensis*, *Drosophila bhagamandalensis*, India 7174.
 taxonomy, morphology, *Drosophila dominici*, India, Darjeeling 8795.
 taxonomy, morphology, *Drosophila neokurokawai*, India 7175.
 taxonomy, morphology, *Drosophilidae*, Australia 8705.
 taxonomy, morphology, *Drusus noricus*, Austria, Carinthia Mts. 3235.
 taxonomy, morphology, *Drymusa armasi*, *Drymusa spectata*, Cuba 8732.
 taxonomy, morphology, *Duculacrus turgetiusus*, Indonesia 2387.
 taxonomy, morphology, *Dysaphis sharmai*, Nepal 7199.
 taxonomy, morphology, *Ekloria helmi*, *Laithorax thaleri*, *Rhaebothorax jamaicensis*, *Rhaebothorax tunisicus*, *Thyphlocyrtus jenseius*, USSR, Siberia 7106.
 taxonomy, morphology, *Ecdynurus samalorum*, *Czechoslovakia* 8798.
 taxonomy, morphology, *Ecdynurus ressi*, *Rhiithrogena theisingeri*, Turkey, Iran 4006.
 taxonomy, morphology, *Ectopira leechi*, USA 4788.
 taxonomy, morphology, *Edovum pulleni* 2454.
 taxonomy, morphology, *Elatoneura pluvialis*, *Mesocnemis dupuyi*, Senegal 7999.
 taxonomy, morphology, *Elongeuna speophillum*, USSR 8843.
 taxonomy, morphology, *Encarsia mineoi*, *Encarsia abatei*, *Eretmocerus cadabae*, Africa 4881.
 taxonomy, morphology, *Encyrtus aquilus*, *Encyrtus melas*, South Africa 8824.
 taxonomy, morphology, *Endomychidae*, Asia 7169.

Subject Index

New species, (continued)

- taxonomy, morphology, *Enoplognatha latimana*, *Enoplognatha penelope* 7152.
taxonomy, morphology, *Epascherodonta polymorpha*, USSR 6464.
taxonomy, morphology, *Epichemes aztecus*, Mexico 8743.
taxonomy, morphology, *Epicrypta lepida*, *Epicrypta helveticia* 4005.
taxonomy, morphology, *Epitranus*, India 8816.
taxonomy, morphology, *Eremobates*, USA 1595.
taxonomy, morphology, *Erycinus beneficus*, India 7207.
taxonomy, morphology, *Erythraeae*, India 7133.
taxonomy, morphology, *Eseneckia biculaea*, *Eseneckia hisuripalpis*, Mexico 7965.
taxonomy, morphology, *Eumidia paludosa*, *Eumidia tundrae*, USSR, Magadan Region 6340.
taxonomy, morphology, *Euphrya evae*, Salticidae, India 801.
taxonomy, morphology, *Euploea longistans*, India, Darjeeling 6349.
taxonomy, morphology, *Eupubicia expallidata*, Finland 7220.
taxonomy, morphology, *Eurytoma palustris*, *Eurytoma scabriterga*, *Eurytoma antistrophe*, *Eurytoma euneiforma*, *Eurytoma strigosa*, *Eurytoma orbiculae*, North America 8825.
taxonomy, morphology, *Euthima wendae*, Peru, *Euthima araujoi*, *Cylloceria chionea*, Brazil, *Hesychotropa punctata*, *Bucoidea erichsoni*, Ecuador 8758.
taxonomy, morphology, *Euthysira kinyuensis*, China, People's Rep. 2474.
taxonomy, morphology, *Euxoa castanea*, Canada, British Columbia, *Euxoa inscripta*, USA, Colorado 8839.
taxonomy, morphology, *Euxoa guadalupensis*, *Euxoa occidentalis* 7996.
taxonomy, morphology, *Exalidion tetracanthum*, Brazil 4780.
taxonomy, morphology, *Falsamblesia ibyrai*, Brazil 6357.
taxonomy, morphology, *Fannia stigi*, Scandinavia 7971.
taxonomy, morphology, *Fergusonia sztygi*, India 4831.
taxonomy, morphology, *Filistata bngiholi*, Mexico 8733.
taxonomy, morphology, *Flavicomaculus*, China, People's Rep. 3996.
taxonomy, morphology, *Friesea albifrons*, *Odontella jermeni*, Lesser Antilles 6386.
taxonomy, morphology, *Friesea hofmannorum*, Mexico 4820.
taxonomy, morphology, *Friesea hofmannorum*, Mexico, Morelos 8781.
taxonomy, morphology, *Gabonia gabriela*, Kenya 3987.
taxonomy, morphology, *Galedonta cornuta*, *Galedonta rotundicornis*, Brazil 5582.
taxonomy, morphology, *Galumna zachvatkini*, USSR 6348.
taxonomy, morphology, *Gambusia edmonia*, *Gambusia ibyrai*, *Gambusia hibici*, *Lubinia kasieci*, *Lubinia latokienyi*, *Empoasca kanungurica*, *Empoasca ugandana*, Uganda, *Rwenzori Nail Park* 7203.
taxonomy, morphology, *Gampsocleis ruykueensis*, *Ruykue* 15 7238.
taxonomy, morphology, *Garananinus antennatus*, *Jessopocoris scutellatus*, *Rotundomus punctatus*, *Pachypterus gigas* 4851.
taxonomy, morphology, genetic analysis, *Anopheles letabensis*, *Anopheles hughii* 5566.
taxonomy, morphology, genitalia, *Cyrtopogon sabroskyi*, USA, Wyoming 2421.
taxonomy, morphology, genitalia, *Psallus physocarpus*, USA, New York 2435.
taxonomy, morphology, geographical distribution, *Ancylodella* 6453.
taxonomy, morphology, geographical distribution, *Ancylodella*, China, People's Rep. 841.
taxonomy, morphology, geographical distribution, *Pericoma bavariae*, Germany, Fed. Rep., Bavaria, *Murnauer Moos* 4730.
taxonomy, morphology, *Goera schmidtii*, Thailand 8005.
taxonomy, morphology, *Gonatocerus sarawakensis*, *Polymena robusta*, Malaysia 4037.
taxonomy, morphology, *Gongrocenensis ignota*, *Gongrocenensis peruviana*, *Gongrocenensis veta*, Peru, Brazil 6454.
taxonomy, morphology, *Gonolabis bidentata*, *Gonolabis gilesi*, *Gonolabis dentata*, Australian Region 7959.
taxonomy, morphology, *Gonzalezinus squamosus*, Chile 4854.
taxonomy, morphology, *Gretchena obsoleta*, USA, California 7993.
taxonomy, morphology, *Griposterygidae*, Australia 5609.
taxonomy, morphology, *Guanella nematocera*, *Guanella pilosa*, *Guanella trimaculata*, *Guanella tuberculifrons*, Panama 4858.
taxonomy, morphology, *Gypona*, Bolivia 2440.
taxonomy, morphology, *Gypona metalana*, *Gypona rubranura*, *Gypona decora*, *Gypona quadra*, *Gypona mocamba*, *Gypona platona*, *Gypona colomella* 2444.
taxonomy, morphology, *Gypona fortuna*, *Gypona boqueti*, *Gypona chiriquae*, *Gypona impeta*, Panama, Mexico 4017.
taxonomy, morphology, *Gypona*, South America 7984.
taxonomy, morphology, *Habitat*, *Numbocera panderi*, USA, Southeast 4845.
taxonomy, morphology, *Habropogon capensis*, *Hermannomyia oldroydi*, Lesotho, South Africa 4832.
taxonomy, morphology, *Halacarus*, Atlantic Ocean 6343.
taxonomy, morphology, *Halidayina exserta*, *Halidayina asymmetrica* 7972.
taxonomy, morphology, *Haplicarus pandanus*, Micronesia, Yap I. 3965.
taxonomy, morphology, *Haplicarus pandanus*, Micronesia, Yap I. 8717.
taxonomy, morphology, *Hemileuca maia peigleri*, USA, Texas 6446.
taxonomy, morphology, *Heteratris mendeni*, Argentina, Misiones, *Iguazu* 6452.
taxonomy, morphology, *Heteratris imbroensis*, *Claduridia critica*, *Pristiphora critica*, Crete 6427.
taxonomy, morphology, *Heterocleptes spinosus*, Borneo 4013.
taxonomy, morphology, *Heteronema multicaule*, Papua New Guinea 3988.
taxonomy, morphology, *Himeunka bana*, *Himeunka chibana* 4018.
taxonomy, morphology, *Histeridae* 8768.
taxonomy, morphology, *Histeridae*, New Guinea 2393.
15, taxonomy, morphology, *Holothrochus*, South America 7958.
taxonomy, morphology, *Hughelechia giuliani*, Australia 4779.
taxonomy, morphology, *Hyalidostoma elongatus*, Colombia 4849.
taxonomy, morphology, *Hyalomyces nuchellensis*, USA, North Carolina 5589.
taxonomy, morphology, *Hydrochara simula*, USA, Wisconsin 4819.
taxonomy, morphology, *Hydrophorus boreus*, North America 4774.
taxonomy, morphology, *Hydrobathus pontis*, Brazil 4801.
taxonomy, morphology, *Hyperpharus prosi*, *Schoenfeldtopsis zikani* 7157.
taxonomy, morphology, *Hyperopora expansa*, *Hyperopora serrata*, *Hyperopora capitata*, Brazil, Minas Gerais 6420.
taxonomy, morphology, *Hyptis hmalayensis*, India 3172.
taxonomy, morphology, *Idiotops opaca*, *Gondwanadium seotranoides*, *Physogasterinus lanuginosus*, *Prohylithus peruanus*, *Heterophylus ruficornis*, *Phytocentrus catharinus*, *Gondwanadium bieni*, South America 7949.
taxonomy, morphology, *Iguassouides lucidus*, *Paraluederwaldia carmascchi*, Brazil 4738.
taxonomy, morphology, *Indophanus daktishus*, India, Kerala 7159.
taxonomy, morphology, *Isaerus* 8747.
taxonomy, morphology, *Isodermis dimorphus*, Tasmania 4010.
taxonomy, morphology, *Isometrus besucheti*, *Isometrus acanthus loebli*, Ceylon 4770.

New species, (continued)

- taxonomy, morphology, *Ilachrysa lobini*, *Amaiochrysa teirizens*, *Suaris piresi*, Cape Verde Islands 4059.
taxonomy, morphology, *Ixodes* 3974.
taxonomy, morphology, *Janomima ibandana*, Africa 840.
taxonomy, morphology, *Jeunusheles*, Asia 3200.
taxonomy, morphology, *Johnstoniomyia bezzii*, *Johnstoniomyia gressitti*, Australasian Region 4841.
taxonomy, morphology, *Kaila lamota*, *Kaila dziba*, *Kaila capreola*, *Kaila seydeli*, *Kaila coronata*, *Kaila roka*, *Empoasca silukos*, *Empoasca ntaga*, *Empoasca liberiana*, *Empoasca ura*, *Empoasca malagasia*, *Empoasca squamosa*, Africa 33.
taxonomy, morphology, *Kesselius chaulioides*, Czechoslovakia 4003.
taxonomy, morphology, *Keys*, *Fortepomyia* 8054.
taxonomy, morphology, *keys*, *Rhagoletypota uniformis*, USA, Texas 2420.
taxonomy, morphology, *keys*, *Trypoxylon* 4882.
taxonomy, morphology, *keys*, *Vemilia longina* 5.
taxonomy, morphology, *Knighthood nigroscutella*, Peru 4849.
taxonomy, morphology, *Kobuzo multibuterculata*, India, West Bengal 1613.
taxonomy, morphology, *Kruia chrysopelma*, Africa 6356.
taxonomy, morphology, *Labridocla cepula*, USA, Texas 5586.
taxonomy, morphology, *Lagynodes obscuripes* 7214.
taxonomy, morphology, *Lamora hemi*, India 1663.
taxonomy, morphology, *larvae*, *pupae*, *Simulium patziense*, Guatemala 1631.
taxonomy, morphology, *Larus draco*, *Larus mukur*, Asia, Himalayan Mts 5590.
taxonomy, morphology, *Laigera ornatus*, *Impatiens americanus*, Mexico 4863.
taxonomy, morphology, *Leobanum sadoense*, Japan, Sado I. 7154.
taxonomy, morphology, *Leptidoptera typoxylota* 2414.
taxonomy, morphology, *Leptocera digra*, Bulgaria 8785.
taxonomy, morphology, *Leptocera teskeyi*, *Leptocera flaminata*, *Leptocera bajanum*, Nearctic Region 3201.
taxonomy, morphology, *Leucospis samianus*, North America, West 8821.
taxonomy, morphology, *Leucospis psophocarpa*, New Guinea 4897.
taxonomy, morphology, *Leucospis lankana*, Sri Lanka 7216.
taxonomy, morphology, *Leucospis mackerras*, Australia 2458.
taxonomy, morphology, *Leuctra scyrticola*, USA, Louisiana 1675.
taxonomy, morphology, *life cycle*, *Rhipicephalus zambezensis*, Africa 2377.
taxonomy, morphology, *Lignivodes deckmanni*, Turkey 4802.
taxonomy, morphology, *Lophium yukon*, USA, Alaska 5551.
taxonomy, morphology, *Lissonosoma macroculum*, Brazil 6367.
taxonomy, morphology, *Listriophorus beaumonti*, *Listriophorus myops*, *Listriophorus nitor*, *Listriophorus rarus*, *Listriophorus serratus*, *Listriophorus specialis*, *Listriophorus typicus*, Neotropical Region 8756.
taxonomy, morphology, *Lutobius imbricatus*, *Lutobius degeboeli*, Asia 4069.
taxonomy, morphology, *Lopus asperus*, Ecuador 7985.
taxonomy, morphology, *Lutzomyia pennsylvanica*, Brazil, Central Amazon Region 7188.
taxonomy, morphology, *Macromalthus belemensis*, Brazil 7941.
taxonomy, morphology, *Macropsinae*, India 4861.
taxonomy, morphology, *Macropsis* 3212.
taxonomy, morphology, *Magesia corkerae*, Hong Kong 7181.
taxonomy, morphology, *males*, *Prata* 802.
taxonomy, morphology, *Marasimia patialis*, Southeast Asia 842.
taxonomy, morphology, *Megastela argophaga* 7966.
taxonomy, morphology, *Meoneura moravica*, Czechoslovakia 6872.
taxonomy, morphology, *Metricia thurvae*, Chile 7243.
taxonomy, morphology, *Micreturus subglaber*, Japan 5519.
taxonomy, morphology, *Microdon abditus*, *Microdon abstrusus*, *Microdon adventitus* 2427.
taxonomy, morphology, *Microlepidoptera*, Norfolk I. 4041.
taxonomy, morphology, *Microtrambula tanzaniae*, *Whartonia novemsetosa*, Tanzania 6344.
taxonomy, morphology, *Minotocypus eximius*, *Minotocypus flavifrons*, *Minotocypus obscurus*, *Minotocypus rarus*, *Minotocypus serratus*, *Minotocypus tuberculatus*, Oriental Region 8820.
taxonomy, morphology, *Misagra*, Venezuela 3228.
taxonomy, morphology, *Mitopus ercaeus*, British Isles 8740.
taxonomy, morphology, *Mitopus vociferi*, Canada, New Brunswick 7935.
taxonomy, morphology, *Mochlonys triangularis* 8791.
taxonomy, morphology, *Monarus rambucus*, India 7161.
taxonomy, morphology, *Monrosia upu*, Brazil 6369.
taxonomy, morphology, *Monrosia sulcata*, Brazil 6358.
taxonomy, morphology, *Montebellus gentilis*, New Caledonia 6417.
taxonomy, morphology, *Myaptes acutus*, Chile 7178.
taxonomy, morphology, *Myomyia gothalsi*, Panama, Barro Colorado 4833.
taxonomy, morphology, *Myrmica schencki starki*, *Tetramorium ferox*, *Tetramorium armatum*, *Proformica jactans*, Mongolia, People's Rep. 8678.
taxonomy, morphology, *Nanorchestes* 8721.
taxonomy, morphology, *Nanorchestes collinus*, *Nanorchestes gilli*, *Nanorchestes jodiae*, *Nanorchestes illano*, *Arctes* 3963.
taxonomy, morphology, *Nanorchestes wilkensis*, Antarctica, Marie Byrd Land 7148.
taxonomy, morphology, *Napodytes boki*, Ecuador 6355.
taxonomy, morphology, *Nasutitermes acutangulus*, Brazil 8834.
taxonomy, morphology, *Nasutitermes pangleri*, Ecuador 6415.
taxonomy, morphology, *Nemobrenthus bechynei*, *Nemobrenthus pereirai*, Brazil 8755.
taxonomy, morphology, *Neoradiolus inyangani*, Zimbabwe 8789.
taxonomy, morphology, *Neobedius*, South America 4817.
taxonomy, morphology, *Neomphera tuomikoski*, Finland 7961.
taxonomy, morphology, *Neotulus*, Peru, Brazil 1616.
taxonomy, morphology, *Neoptera*, India 7240.
taxonomy, morphology, *Neopocopus acetypticus*, *Pyctia hispanica* 4908.
taxonomy, morphology, *Neotyledites mexicanus* 2383.
taxonomy, morphology, *Nephapis bicolor*, *Nephapis namolika* 5560.
taxonomy, morphology, *Nepitula hexapetala*, *Nepitula szocsi*, *Bedellia ehekila*, *Paromix szocsi*, *Triflura gozmanyi*, Hungary, Budapest 8677.
taxonomy, morphology, *Nesocladia muirata*, Sri Lanka 5598.
taxonomy, morphology, *Neurocampa tenuipennis*, Pakistan 5577.
taxonomy, morphology, *new records*, *Hilipinus nearcticus*, USA 4811.
taxonomy, morphology, *new records*, *Trichoptera*, Finland 1570.
taxonomy, morphology, *Niphanohelms banna*, Thailand 7187.
taxonomy, morphology, *Niphocheus aboriginis*, *Proteramaeus macleani*, *Asperamaeus longipilis*, USSR 7933.
taxonomy, morphology, *Niphogena* 6399.
taxonomy, morphology, *Noctuidae taylorbana*, Sri Lanka 7962.
taxonomy, morphology, *Noctuidae sinensis*, Israel 4834.
taxonomy, morphology, *Nodopus tibialis*, North America 7951.
taxonomy, morphology, *Nomada*, Turkey 4028.

- taxonomy, morphology, *Notopodius*, India 7136.
taxonomy, morphology, *Notonax bahuwanensis*, Tanzania 3982.
taxonomy, morphology, *Oechthebus medius* 5559.
taxonomy, morphology, *Ocostigma herbivora*, Tonga 6388.
taxonomy, morphology, *Oedignatha campesina*, Brazil 8735.
taxonomy, morphology, *Oedoporena minor*, Japan 7185.
taxonomy, morphology, *Ogellia tana*, Ogellia Island, Sweden 3977.
taxonomy, morphology, *Oligonychus selegiensis*, Seneegal 8713.
taxonomy, morphology, *Omicrini* 4786.
taxonomy, morphology, *Oncosomemchusa besucheti*, *Emmeleostiba besucheti*, Lebanon 7164.
taxonomy, morphology, *Ophiophomus acuminatus*, Tennessee 3229.
taxonomy, morphology, *Oppia getica*, *Oppiella distincta*, *Urbaniabates romanicus* 3.
taxonomy, morphology, *Oreobolia spuriaris*, *Oreothalia sierrensis*, *Oreothalia chilensis*, Nearctic Region 2426.
taxonomy, morphology, *Oribatidia*, Greece 7142.
taxonomy, morphology, *Ormithomyia rupes*, Switzerland, Gibraltar 6405.
taxonomy, morphology, *Orobittacus obscurus*, USA, California 6450.
taxonomy, morphology, *Orygathothorax insignis*, Brazil 6443.
taxonomy, morphology, *Orthoxyla dunbartonensis*, *Oxyethra sinisignis*, *Oxyethra* 7164.
taxonomy, morphology, *Oxyptoda besucheti*, Switzerland 7621.
taxonomy, morphology, *Pachybrachis alpinus*, France 8765.
taxonomy, morphology, *Pacificulus imbricatus*, *Anaulaculus golovatchi*, USSR 6465.
taxonomy, morphology, *Pagelmus amazonica*, Ecuador 4790.
taxonomy, morphology, *Palaeorhiza* 1656.
taxonomy, morphology, *Pamphilus laurus* 8929.
taxonomy, morphology, *Parabellia callosa*, *Parabellia callosa*, *Parabellia dubitata*, *Parabellia styliera*, *Parabellia tapiripes*, Brazil 8840.
taxonomy, morphology, *Paraburpes robustus*, *Sotekia minima* 7155.
taxonomy, morphology, *Paracrepidaspis wilkeyi* 1644.
taxonomy, morphology, *Paradamoetes changunolui*, Panama 7149.
taxonomy, morphology, *Paradinda suscia*, Yugoslavia 4893.
taxonomy, morphology, *Paragnetina ichusa*, *Paragnetina leodensis* 6456.
taxonomy, morphology, *Paragus ascensis*, *Paragus antioquiensis*, France, Corsica, Sardinia 8793.
taxonomy, morphology, *Paraleucopis mexicana*, Mexico, California GULF 2425.
taxonomy, morphology, *Paralimosina anaptera*, *Paralimosina franzi*, *Paralimosina gomereensis*, *Paralimosina* 7164.
taxonomy, morphology, *Parapentatella eugeniae*, USSR, Ukraine 7218.
taxonomy, morphology, *Paraschoenus magnatulus*, *Paraschoenus* 8727.
taxonomy, morphology, *Paraschoenus*, *Paraschoenus* 4872.
taxonomy, morphology, *Paraxillus divinus*, Brazil 6373.
taxonomy, morphology, *Parandypus znanoudskii*, Crete 8782.
taxonomy, morphology, *Paronella yueana*, Brazil, Rio de Janeiro 8779.
taxonomy, morphology, *Parvidens arida*, Namibia 4843.
taxonomy, morphology, *Pentatomia kunningensis*, China, People's Rep. 2436.
taxonomy, morphology, *Peponia padrella*, North America 7230.
taxonomy, morphology, *Peperomyia longirhynchus*, *Peperomyia microlevis* 4857.
taxonomy, morphology, *Pennisopalla calculata*, *Pennisopalla rathionis*, *Pennisopalla* 4764.
taxonomy, morphology, *Pentheris rubra*, Ecuador 6451.
taxonomy, morphology, *Pentropella malgache*, Madagascar 4852.
taxonomy, morphology, *Phaenota aserratus*, USSR, Siberia 6393.
taxonomy, morphology, *Phaenota*, *Phaenota* 7217.
taxonomy, morphology, *Phaenotaxia*, East Africa 4063.
taxonomy, morphology, *Phonogaster longipunctulata*, China, People's Rep. 4904.
taxonomy, morphology, *Phora speighti*, Ireland 6391.
taxonomy, morphology, *Phuracardus*, Brazil 3971.
taxonomy, morphology, *Phyllobaenus atriplex* 6360.
taxonomy, morphology, *Phyllocolus*, India 3964.
taxonomy, morphology, *Phyllocolus*, *Phyllocolus* common, Australia 2412.
taxonomy, morphology, *Piccola striata*, Brazil 4899.
taxonomy, morphology, *Pipunculus lichtwardi*, Czechoslovakia 2418.
taxonomy, morphology, *Pison areolaris*, *Pison ciliatum*, *Pison barbanum*, Australia 2448.
taxonomy, morphology, *Plagiognathus ribesi*, Canada, British Columbia 4007.
taxonomy, morphology, *Platysacarus oligolus*, *Platysacarus domocorum* 8719.
taxonomy, morphology, *Platysacarus*, *Platysacarus* Panama, Porto Bello 4848.
taxonomy, morphology, *Plecoptera*, Australia 4907.
taxonomy, morphology, *Plinthus pawlowski*, Turkey, Tatos Mts. 19.
taxonomy, morphology, *Polycloselya angusticeps*, *Hectopselya gracilis*, Argentina 7241.
taxonomy, morphology, *Plusiocampa bonadonai pavani*, Switzerland, Valais 4822.
taxonomy, morphology, *Podagronia* 1654.
taxonomy, morphology, *Pogononema coleii*, *Pogononemymex laevindus* 7217.
taxonomy, morphology, *Polana portochuela*, *Polana innata*, *Polana pravada*, *Polana tritubera*, *Polana tuberosa*, *Polana orcula*, Bolivia 8809.
taxonomy, morphology, *Polana portochuela*, *Polana innata*, *Polana pravada*, *Polana tritubera*, *Polana tuberosa*, *Polana orcula*, Bolivia 5585.
taxonomy, morphology, *Polycyrtoporus pristinii*, Italy 3234.
taxonomy, morphology, *Polymena* 798.
taxonomy, morphology, *Polyzonium valeri*, *Polyzonium cyathiferum*, USSR, Siberia 6463.
taxonomy, morphology, *Prochirus lankus*, *Thoracochirus decanus*, *Paederus besucheti*, *Paederus loebli*, *Paederus mussardi*, India, Sri Lanka 4809.
taxonomy, morphology, *Pronus arenarius*, *Pronus insulii* 7957.
taxonomy, morphology, *Pronidneura flavificans*, Zambia 7237.
taxonomy, morphology, *Pronidneura levinodensis*, USSR, Tashkent 6389.
taxonomy, morphology, *Prokelisia doli*, *Prokelisia carolae*, USA 8813.
taxonomy, morphology, *Proleptismina tuxeni* 4065.
taxonomy, morphology, *Prosimulium laami*, Morocco 3993.
taxonomy, morphology, *Protostolus martinzi*, Venezuela 6368.
taxonomy, morphology, *Protomyobia indianensis*, parasites, hosts, Sorex longirostris, USA, Indiana 1591.
taxonomy, morphology, *Protosialis*, South America, Amazon R. Basin 7235.
taxonomy, morphology, *Protomarmaria*, India, Kashmir 1641.
taxonomy, morphology, *Protura*, USA, Alaska 4062.
taxonomy, morphology, *Pseudochorutes quadristetosus*, USA, Florida 1618.
taxonomy, morphology, *Pseudopharyx clavatus*, USSR, Russia, Sakhalin I. 6439.
taxonomy, morphology, *Pseudopharyx*, Mexico 2446.
taxonomy, morphology, *Pseudoanthidium microntes*, *Pachyanthidium semiluteum*, *Anthidium flavum*, *Anthidium levinodensis*, USSR, Tashkent 6389.
taxonomy, morphology, *Pseudodactyloctenium novissimum*, *Pseudodactyloctenium* 7191.

New species, (continued)

- karaukallensis 8889.
taxonomy, morphology, *Pseudolobetus ubialis*, Costa Rica 7943.
taxonomy, morphology, *Pseudomyoma punctipennis*, *Thecophora rufifrons*, Argentina 6392.
taxonomy, morphology, *Pseudomyoma* comb. nov., South Africa 8837.
taxonomy, morphology, *Pseudoptopon* 7466.
taxonomy, morphology, *Pseudoscorpiones*, Kenya 4768.
taxonomy, morphology, *Pseudosydus kempi*, India 7158.
taxonomy, morphology, *Pseudutyopocerus*, *Strangalia*, Central America 6385.
taxonomy, morphology, *Psocidae*, New Guinea 3232.
taxonomy, morphology, *Psychodidae*, USSR, Azerbaijan, Iran 3199.
taxonomy, morphology, *Psychopora*, Africa 1649.
taxonomy, morphology, *Psyllidae*, *Clamidae*, Denmark 4783.
taxonomy, morphology, *Psychopsis phalaria*, Ecuador 835.
taxonomy, morphology, *Pycta nadleri*, Israel 8841.
taxonomy, morphology, *Pycta verna*, Asia, Himalayas 8814.
taxonomy, morphology, *Pycta verna*, Asia, Himalayan Mts. 4016.
taxonomy, morphology, *Quedius*, USA, Oregon 2399.
taxonomy, morphology, *Rachana circumdata*, *Rachana circumdata panayensis*, *Deudorhynchus philippinensis*, Philippines 4891.
taxonomy, morphology, reviews, *Roederioidea* 6401.
taxonomy, morphology, *Rhamphus*, France 8757.
taxonomy, morphology, *Rhopalosiphonum ehetis*, India 7198.
taxonomy, morphology, *Rhyacophila*, USA, California, Placer Co. 6461.
taxonomy, morphology, *Rhynchaptomyidae*, India 7134.
taxonomy, morphology, *Rhynchacinae*, India 7172.
taxonomy, morphology, *Ricinoides megahanseni*, Ivory Coast 7156.
taxonomy, morphology, *Rumicita grandicula*, *Apbalaria migrimaculosa*, *Psadyla montanica*, USSR, Transcaucasia 6423.
taxonomy, morphology, *Samoria* *fasano*, *Samoria speciosa* 5561.
taxonomy, morphology, *Sanderseilus panamensis*, Panama 6421.
taxonomy, morphology, *Sasacarus incae*, *parensis*, *Lestoros inca*, Peru 1587.
taxonomy, morphology, *Sasatrombicula umbrosionis*, Papua New Guinea 8728.
taxonomy, morphology, *Sasacarus ghyphocela*, Brazil 8736.
taxonomy, morphology, *Sacchellielia vallanti*, Italy, Bormida R. 3192.
taxonomy, morphology, *Scaphytopius flavifus*, *Choroleptus canolatorus*, *Idona murrayae*, Costa Rica, Cocos I. 7981.
taxonomy, morphology, *Scatopse globulicauda*, Europe, Alps 6409.
taxonomy, morphology, *Scenopinus gobiensis*, *Scenopinus kaszabi*, *Scenopinus maculosus*, *Scenopinus afghanistanensis*, *Scenopinus mariensis*, Mongolia, People's Rep., Afghanistan, USSR, Turkmenia 1973.
taxonomy, morphology, *Scenopinus*, Papua New Guinea 4763.
taxonomy, morphology, *Scirpophaga kumatai*, *Scirpophaga nepalensis*, Nepal 7221.
taxonomy, morphology, *Scrobipalpa sindiaria*, Iraq 6444.
taxonomy, morphology, *Sericopelma*, *Brachypelma*, Costa Rica 6352.
taxonomy, morphology, *Setodes dixiensis*, *Setodes arenatus*, USA, Southeast 5612.
taxonomy, morphology, *Sigara papuensis*, Papua New Guinea 4748.
taxonomy, morphology, *Sigara papuensis*, Papua New Guinea 8800.
taxonomy, morphology, *Sinentomon chi*, Korea 6459.
taxonomy, morphology, *Siphoniorus demaryi*, Canada, Nova Scotia 1632.
taxonomy, morphology, *Siphoniorus minnoi*, *Pseudocloeon cestum*, North America 4846.
taxonomy, morphology, *Siphona ingeri*, *Siphona mesnili*, *Siphona variata*, *Siphona* *Denmarki* 7180.
taxonomy, morphology, *Smunthurus carolinensis*, USA, South Carolina 1617.
taxonomy, morphology, *Smunthurus incognitus*, USA, Florida 4821.
taxonomy, morphology, *Solenoglyphus carolinensis*, USA, Florida 8817.
taxonomy, morphology, species composition, *Trichopora*, Australia, Southwest 7244.
taxonomy, morphology, *Spermophagus caricus*, Turkey 8777.
taxonomy, morphology, *Sphaerochthonius*, *Ameripopia*, *Multipipia*, *Oppia*, *Tectetremacus*, Tahiti, Fiji, Philippines 7139.
taxonomy, morphology, *Sphagmoeca paraensis*, *Sphagmoeca sunralis*, Brazil 6381.
taxonomy, morphology, *Spinixium tibetensis*, China, People's Rep. 2386.
taxonomy, morphology, *Staphylinidae*, Asia 4812.
taxonomy, morphology, *Stenalis* *arctica*, *Stenalis* *desertiola* 6375.
taxonomy, morphology, *Stenopogon flinti*, Antilles 5606.
taxonomy, morphology, *Stenonema bednarki*, USA, Kentucky 2432.
taxonomy, morphology, *Stenopogon*, *Michotamia*, India 7179.
taxonomy, morphology, *Stenus josefkruli*, USSR, Kazakhstan, Hungary 7952.
taxonomy, morphology, *Stenotermus uzbeki*, Spain 7931.
taxonomy, morphology, *Stictella* *arctica*, *Stictella*, *Stictella gillaspayi*, USA, Arizona, Mexico, *Stictella villagasi*, USA, California 8827.
taxonomy, morphology, *Stigmella privora*, Cyprus 4892.
taxonomy, morphology, *Suricataeus fenecus*, Egypt 6448.
taxonomy, morphology, surveys, *Neotropella*, Brazil 4745.
taxonomy, morphology, *Sybra mozeri*, New Guinea 3182.
taxonomy, morphology, *Symmetrischura* *lendaalorum*, USA, Texas 7992.
taxonomy, morphology, *Syndoschia ekiciola* 5570.
taxonomy, morphology, *Systropus*, Asia 8786.
taxonomy, morphology, *Tabanidae*, China, People's Rep. 814.
taxonomy, morphology, *Tachius*, China, People's Rep. 7173.
taxonomy, morphology, *Tadua tucuiensis*, *Platyseius tucuiensis*, *Neofurios panama*, Brazil 4854.
taxonomy, morphology, *Taeniaptera alcesae*, *Taeniaptera inapi*, Brazil 3992.
taxonomy, morphology, *Taeniaptera tetrascarinata*, Brazil 7186.
taxonomy, morphology, *Taeniopteryx nelsoni*, USA, Virginia 4906.
taxonomy, morphology, *Tanaccia coccyns viasayana*, Philippines 4890.
taxonomy, morphology, *Tarsonemidae*, USSR, Crimea 6342.
taxonomy, morphology, *Tarsonemus* *sp.* 6347.
taxonomy, morphology, *Tarumites vilulus*, Brazil 8835.
taxonomy, morphology, *Tectocephus*, Japan 2.
taxonomy, morphology, *Tectocephus titanus*, Japan, Sado I. 7143.
taxonomy, morphology, *Tegolophus kaliyani*, *Tetra lanneensis*, India 7137.
taxonomy, morphology, *Teniconopces pahangensis*, *Teniconopces cyncyctis*, *Teniconopces brevis*, Malaysia, India 8726.
taxonomy, morphology, *Teles crassus*, *Teles neptuni*, *Teles niger*, *Teles punctifrons*, *Teles tericola*, *Teles vilus* 2461.
taxonomy, morphology, *Telenomus punctigaster*, *Telenomus homopterae*, *Ascolius turkarakandae*, Turkey 7988.
taxonomy, morphology, *Tenupalpus*, India 8715.
taxonomy, morphology, *Terulia woldai*, Panama, *Terulia triangularis*, Nicaragua 8845.
taxonomy, morphology, *Tetrastichus ecidobroter*, USA, California 7963.
taxonomy, morphology, *Thigia fossiata*, *Thigia bidentata*, *Thigia mutabilis*.

New species, (continued)

- Thargia bifurcata, Thargia barbata, Thargia retrorsa, Thargia hollowayi, Borneo, Sumatra, Sarawak 8808
- taxonomy, morphology, Tharra lanceolata, Tharra ciliata, Tharra angusta, Tharra hammeri, Tharra epidantata, Tharra hamata, Tharra trispinata, Australasian Region, Tharra sarawakensis, Oriental Region 8807
- taxonomy, morphology, Thaumalea alpina, Thaumalea toscana, Europe 2428
- taxonomy, morphology, Theraphosidae, Costa Rica 3173
- taxonomy, morphology, Theridion anisi, Czechoslovakia 8737
- taxonomy, morphology, Thermonecus sibleyi, Thermonecus zimmermani 7953
- taxonomy, morphology, Thyrophagus vermicularis, British Isles, Scilly Is. 8729
- taxonomy, morphology, Timberlakea signata, Timberlakea gilva, South Africa, Transvaal 8822
- taxonomy, morphology, Tingidae, Africa 4856
- taxonomy, morphology, Tings cananensis, Tings seidenstuecken 4855
- taxonomy, morphology, Tings otomana 8804
- taxonomy, morphology, Timisa yaloma, Timisa classica 4053
- taxonomy, morphology, Tipula submontium, Iberia peninsula 9469
- taxonomy, morphology, Tityus lamottei, Brazil, Bahia 4769
- taxonomy, morphology, Tonnoirella mirabilis, Caenobryozoa echnoflagellata, Brazil 1630
- taxonomy, morphology, Tortyra hoguella, Costa Rica, Cocos I. 4888
- taxonomy, morphology, Toxopeusella 5584
- taxonomy, morphology, Trachymyrmex kempi, Paraguay, Chaco Basin 5595
- taxonomy, morphology, Tranea rustica, Tranea minuta, Venezuela 8000
- taxonomy, morphology, Tremissis inexpectatus, Tremissis baumtoni, Turkey, Israel 8754
- taxonomy, morphology, Trepobates carri, Trepobates polheimi 5578
- taxonomy, morphology, Trichaphaenops raffaldianus, France 8746
- taxonomy, morphology, Trichatela, Ecuador 5611
- taxonomy, morphology, Trichura veranae 4040
- taxonomy, morphology, Trichocyllia 3975
- taxonomy, morphology, Trichogramma, Hawaii 8820
- taxonomy, morphology, Trichogramma juliano, USA, New York 4867
- taxonomy, morphology, Trichogramma marylandense, USA, Maryland 5600
- taxonomy, morphology, Trichogramma schuberti, Trichogramma rhena, France, Alsace 4876
- taxonomy, morphology, Trichomyia malickyi 5565
- taxonomy, morphology, Trichonyssodrys cinctus, Trichonyssodrys melasmas, Brazil 4778
- taxonomy, morphology, Trichopria fumipennis, Trichopria billaveora 4868
- taxonomy, morphology, Trichoptera, Eurasia 4067
- taxonomy, morphology, Tricorynus dudleyae, Tricorynus fuliginosa, Byrrhodes ovatus, USA 2460
- taxonomy, morphology, Trimerina intemeliae, Italy 3997
- taxonomy, morphology, Trochiloschema michailovi 7947
- taxonomy, morphology, Trombicula novaeitania, Papua New Guinea, New Britain 4762
- taxonomy, morphology, Trypanophellos necopinus, Cuba 7167
- taxonomy, morphology, Trypoxylon, Formosa 4854
- taxonomy, morphology, Tychothylus struati, USA, Tennessee, Warren Co. 4815
- taxonomy, morphology, Tylana nigromaculata, Tylana rodriguezi, Mascarenes 4866
- taxonomy, morphology, Typhedanus elisi, Typhedanus cursini, Brazil 8838
- taxonomy, morphology, Typhlocyba newari, Baaora, India 34
- taxonomy, morphology, Umbioella antennata, New Guinea, Umboi I. 4852
- taxonomy, morphology, Urosalpinx 5594
- taxonomy, morphology, Urosalpinx yucatanensis, Urosalpinx meridianus, Mexico 5599
- taxonomy, morphology, USA, Louisiana, Abgrallaspis lirioidentis 1637
- taxonomy, morphology, Vandez dudleyi, Malawi 5564
- taxonomy, morphology, Vargatula pacifica, Solomon Is., Nissan I. 8730
- taxonomy, morphology, Velinae 4014
- taxonomy, morphology, Ventidius austriacus, India, West Bengal 7195
- taxonomy, morphology, Wandesia polyseta 6345
- taxonomy, morphology, Woldana campana, Panama 2439
- taxonomy, morphology, Xaniatus, Australia 2389
- taxonomy, morphology, Xelomus leechi, Xelomus marcapata, Peru 4782
- taxonomy, morphology, Xestoecephalinae, South America 5588
- taxonomy, morphology, Zaheretes africanus 6350
- taxonomy, morphology, Zale chosonensis 5603
- taxonomy, morphology, Zelotocoris vicosensis, Brazil, Vicos 4850
- taxonomy, morphology, Zepedanolus watanabei, Heterogregalia biseriala, Thailand 5550
- taxonomy, morphology, 11 species, Brazil 8788
- taxonomy, morphology, 11 species, Scydinidae, Ecuador, Guatemala 7936
- taxonomy, morphology, 11, Xesiocephalus, Panama 7201
- taxonomy, morphology, 13 species, Cixius, USA, Mexico 6426
- taxonomy, morphology, 13 species, Hyphidus 4816
- taxonomy, morphology, 13 species, Lamiinae, Africa 7938
- taxonomy, morphology, 14 species, Aphanistes, North America 6435
- taxonomy, morphology, 15 species, Lissronotus, North America 6379
- taxonomy, morphology, 16 species, Lordithon, North, America, Central America 6380
- taxonomy, morphology, 2 species, Archocryptocini 3183
- taxonomy, morphology, 2 species, Pogonomyrmex, USA, Texas 6432
- taxonomy, morphology, 28, Curtara, South America, Central America 7200
- taxonomy, morphology, 28 species, Scarabaeinae, Panama 6376
- taxonomy, morphology, 3 species, Ambrysus, Main, 6416
- taxonomy, morphology, 3 species, Calcarimybia, Africa 4766
- taxonomy, morphology, 3 species, Nesitbia, Mexico, Colombia 4702
- taxonomy, morphology, 3 species, Trichogramma, USA, Hawaii 4021
- taxonomy, morphology, 32, Gyrona, South America, Central America 7205
- taxonomy, morphology, 3 species, Diachlorus, South America 7970
- taxonomy, morphology, 3 species, Eostegana, Philippines, Papua New Guinea 3989
- taxonomy, morphology, 3 species, Systropha, China, People's Rep., Taiwan 3991
- taxonomy, morphology, 3 species, Tarsonemini, Ethiopia 7932
- taxonomy, morphology, 6 species, Conioperitidae, North America 845
- taxonomy, morphology, 6 species, Phallanias, India, Sri Lanka 4808
- taxonomy, morphology, 6 species, Trombiculidae, Papua New Guinea 6339
- taxonomy, morphology, 66 species, Lamiinae, Africa 7939
- taxonomy, morphology, 7 species, Austrobaraggia 4842
- taxonomy, morphology, 7 species, Myliena, Nearctic Region 4742
- taxonomy, morphology, 8 species, Cerylonidae, Mascarenes 4813
- taxonomy, morphology, 8 species, Hyphantus 6361
- taxonomy, morphology, 8 species, Palaeorhiza, Papua New Guinea, Solomon Is. 4885
- taxonomy, morphology, 8 species, Pseudostegana, Papua New Guinea, Philippines,

New species, (continued)

- Sabah 3990
- taxonomy, morphology, 8 species, Sperchion, USSR 7131
- taxonomy, morphology, 9 species, Aradidae, India 4859
- taxonomy, morphology, 9 species, Cyrtus, India 4810
- taxonomy, Neophantactus 7141
- taxonomy, Neocythius silverbergi, Cormalina betpakdalenensis, Apion tomiense, USSR 5557
- taxonomy, new records, Sciardae, USSR 6396
- taxonomy, Nineta afghanica, Anisochrysa nuristanica, Brinchochrysa naumanni, Afghanistan 4060
- taxonomy, oviparity, fossils, Tertiary, Elephraps lindrothi 792
- taxonomy, parasites, Heterodorus, Australia 2921
- taxonomy, parasites, Trochalaps koenigsmeyer, Apis dorsata, Sri Lanka 3973
- taxonomy, Phertbellia hackmani, Phertbellia stylifera, Phertbellia lutheri 5572
- taxonomy, Philotypis joseph, Syoscapter buricola, India 8830
- taxonomy, Phileobomus acuminatus, Phileobomus mackerrasi 3195
- taxonomy, phylogeny, biogeography, Clambidae, North America 1576
- taxonomy, revision, Usambilla 1669
- taxonomy, Systiridae, Brazil, Amazon Basin 4054
- taxonomy, Sophothrips aleutici, Sophothrips duvali, Sophothrips greensladei 5610
- taxonomy, Staphylinidae, Galapagos Islands 1611
- taxonomy, Stethorus koreanus, Scymnus dorotae, Korea 785
- taxonomy, Stylobrochus subekistanensis, Stylobrochus golovatchi, Eurypterus 96
- taxonomy, Stylobrochus subekistanensis 4070
- taxonomy, Tepidessus breweri, Tropisternus poly, Venezuela 3184
- taxonomy, 30 species, Trypangulum, Society Is. 831
- taxonomy, Tenupalpus cupressoides, Tenupalpus parenophyoides, Aegyptobia eremia, Israel 8724
- Thalania kimba, taxonomy, morphology, New South Wales 3222
- Trichoptera, Mediterranean Region 4066
- New subspecies.**
- Crucioeca mrorata sarda, Ermodus nigroaureus siculus, Mediterranean Region 4066
- morphology, taxonomy, Geotrupes stellosum ananapuricus, Nepal 807
- 6 subspecies, Trypangulum, Society Is. 831
- taxonomy, revision, Lacobius mulsanti 805
- taxonomy, geographical distribution, Hoplia africana, North Africa 1600
- taxonomy, Lepidochrysops jamei classensis, Poecilimus nigricans zwartbergae, Poecilimus palmus margueritae, South Africa 8837
- taxonomy, morphology, Agnus amydon, Costa Rica 7233
- taxonomy, morphology, Agus mellifera adam, Crete 4869
- taxonomy, morphology, Carabus rutilans jeannei 8771
- taxonomy, morphology, Carcinophaga lebengeriae mytensis, India 4045
- taxonomy, morphology, Conococephalus dorsalis beybenkoi, USSR, Russia, Khabarovsk Region 7239
- taxonomy, morphology, Dimorphopterus cornutus, Papua New Guinea 3211
- taxonomy, morphology, food plants, Gloveria medusa edita, USA, California 7226
- taxonomy, morphology, geographical distribution, Dilentitonus filiformis mundus, North America 4025
- taxonomy, morphology, geographical distribution, Labellodes longicornis veronensis, Europe, Alps 4058
- taxonomy, morphology, Lepidochrysops jamei classensis, South Africa 5602
- taxonomy, morphology, Lutzomys olmea novicia, Brazil, Manaus 4839
- taxonomy, morphology, Notodontidae, USSR, Caucasus 4043
- taxonomy, morphology, Onthophagus ruficapillus guianensis, Iran 7171
- taxonomy, morphology, Ophiodermus incurvatus algerianensis 8001
- taxonomy, morphology, Papilio alba phylissae, Papilio idra panamintensis, USA, California 7223
- taxonomy, morphology, Tabanus campalpis teretipennis, USSR 6390
- taxonomy, morphology, Trichura veranae witi, Bulgaria 4046
- taxonomy, morphology, Zygena arzus kurti, Turkey 4051
- taxonomy, morphology, Zygena ephialtes molikiana, Greece 4732
- taxonomy, morphology, Zygonyx torrida insulana, Mauritius 7906
- taxonomy, revision, Janomina dannelfi, dannelfi, deduplicata, westwoodi, nigricans, Africa 840
- New taxa.**
- Bibliographies, Odonata 7930
- taxonomy, taxonomy, revision, Dismolus, North America 5549
- taxonomy, morphology, Cynotrichia 22
- taxonomy, morphology, Homoptera, Czechoslovakia 3213
- taxonomy, morphology, Macropsini 3212
- new subtribe, Chaunivina 4029
- Paolista, Africa 33
- parasites, Iguanacarus 9
- taxonomy, revision, Curculionidae, Japan 1599
- taxonomy, Anthribidae, Japan 1608
- taxonomy, morphology, Batracromphus, Africa 4865
- taxonomy, morphology, Cicindellidae, Australia 4804
- taxonomy, morphology, Desmopachrus 3188
- taxonomy, morphology, Psychodromus squamiventris maripensis, Brazil, Amazonia 5573
- taxonomy, revision, Cicadellidae, Africa 829
- New Zealand.**
- biogeography, streams, rivers, Insecta 3952
- check lists, parasites, Arthropoda, Mammalia 1231
- circadian rhythms, locomotor activity, environmental effects, Hemedina thoracica 4984
- defense secretions, chemical composition, Aryston 1802
- defense secretions, chemical composition, taxonomy, Staphylinidae 247
- geographical distribution, abundance, Procladius grayi 9501
- geographical distribution, life history, Adoryphorus coultoni 453
- geographical distribution, taxonomy, revision, Cartothoracini 4064
- host-parasite interactions, spatial distribution, Quadricentrus domellina, Quadricentrus papuae, Quadricentrus cedonaria, Chardrus obscurus, Thionini novaezelandiae, Anarhyctus frontalis, Chardrus bicinctus 512
- identification keys, morphology, Odonata 6503
- infestation, habitat, Mustela erminea, Synanthra 8332
- infestation, man, skin diseases, Proctolaelaps pygmaeus 2171
- lakes, benthos, species composition, Chironomidae 7817
- life history, population dynamics, mortality, larvae, pupae, Synanthodon salmachus 4415
- pests, integrated control, horticulture 6082
- pests, natural enemies, predators, crops, Beta vulgaris, Aulacothorus solani, Myzus persicae 8492

New Zealand, (continued)

- population regulation, pest outbreaks, environmental effects, *Costelytra zealandica*, *Heteronychus arator* 6911
thermoregulatory behavior, body temperature, *Xanthocnemus zealandica*, *Austrosteles colensois*, *Procecloidea smithi* 6701
weed control, biological control, introduced species, *Ulex europaeus*, *Apion ulicis*, *Apion scutellare*, *Agonotenus ulicetella* 5335
- New Zealand, Banks Peninsula,**
species composition, seasonal variations, habitat preferences, population structure, sex ratio, reproductive status, *Carabidae* 6868
- New Zealand, Canterbury,**
pests, disease transmission, *Hafnia alvei*, *Costelytra zealandica* 5723
seasonal variations, sexual reproduction diapause, phenology, morphology, *Listronotus bonariensis* 1104
- New Zealand, Hebeville,**
parasites, introduced species, dispersal, *Aphidius eadyi*, effects on, *Acyrthosiphon pisum* 506
- New Zealand, North I.,**
crop fields, pest resistance, *Leguminosae*, *Graphognathus leucoloma* 9307
pests, crops damage, *Graphognathus leucoloma*, *Leguminosae* 5415
- New Zealand, North Is.,**
population dynamics, dispersion, aggregation, sampling, *Heteronychus arator* 1300
population dynamics, seasonal variations, mortality, population-environment relations, *Heteronychus arator* 1301
population dynamics, seasonal variations, temperature effects, mathematical models, *Heteronychus arator* 1302
- New Zealand, Opai L.,**
eutrophication, acidity, abundance, *Chironomidae* 1485
- New Zealand, Waitakere R.,**
benthos, life history, seasonal variations, lotic environment 451
shade effects on abundance, community composition, insects 6229
- New Zealand, Wellington,**
emergence, age composition, larvae, *Uropetala carovei carovei* 9085
- Nezara viridula,**
abundance, crop fields, weed control effect on, *Glycine max* 2997
auditory communication, song 8271
copulation time, adaptiveness, parasitism 1898
dispersal, nymphs, legumes, *Pezodorus guildinii*, Brazil 559
effects on crop yield, damage, *Phaseolus lunatus* 1456
food plants, suitability, effects on, survival, development 361
host plants, crop fields, *Sorghum vulgare* 2047
host plants pest resistance, cultivars, *Vigna unguiculata* 4614
hosts, abundance, parasitoids effects on, *Trichopoda giacomellii* 2018
hosts, parasites, reproduction, *Eutrichopodopsis nitens* 6770
hosts, parasitism, *Eutrichopodopsis nitens*, Brazil 6758
infestation, effects on yield, *Sorghum* 6164
larvae, feeding, damage, *Vigna unguiculata* 2235
longevity, reproduction, parasitism effects on, *Trichopoda pennipes* 5936
parasitism, estimation methodology, *Trichopoda pennipes* 2030
pest control, biological control, predators, *Solenopsis invicta* 3790
pest resistance, host plants, *Glycine max* 9353
pests, cultivars, resistance, *Vigna unguiculata* 4614
pests, damage, *Sorghum bicolor* 8581
pests, effects on crop yield, *Vigna unguiculata* 3769
population dynamics, association, phenology, *Glycine max* 8351
reproductive behavior, copulation, spermatogenesis 398
reproductive behavior, longevity, fecundity 6629
- Nezara viridula,**
pest control, natural enemies, surveys 607
- Nicandra,**
host plants, steroids, antifeedants, *Epilachna varivestis* 2077
- Nearctic,**
new species, taxonomy, morphology, *Terulia triangularis* 8805
- Niche breadth,**
niche overlap, foraging behavior, *Bombus*, Sweden 4480
- Niche overlap,**
coexistence, competition, *Hispinae* 8366
foraging behavior, competition, *Indomyrmex pruinosus*, *Myrmecocystus numicus*, *Myrmecocystus depilis* 5999
foraging behavior, resource utilization, castes, *Bombus*, Sweden 4480
pollinators, nectar, competition, population density, *Bombus* 2059
sympatric populations, interspecific relationships, *Morpho granadensis* polybaptes, *Morpho peleides limpidus*, Costa Rica 5141
- Niche partitioning,**
competition, community structure, *Bombus*, USA, Colorado 4469
- Niche pattern,**
feeding behavior, developmental stages, yeast attractancy, *Drosophila buzzatii*, *Drosophila aldrichi* 3303
feeding behavior, genetic variance, yeast attractancy, *Drosophila buzzatii*, *Drosophila aldrichi* 3368
food sources, foraging behavior, *Bombus terrestris*, *Bombus lapidarius* 6835
life history, galls, *Aciurina*, *Chrysotoxus* 6792
phylogeny, oviposition site selection, *Drosophila melanogaster* 3530
population-environment relations, morphology, *Geocia utricularia* 3629
sympatric populations, speciation, food sources, *Drosophila*, Australia 5496
- Niches,**
habitat, association, grasslands, *Auchenorrhyncha*, German Dem. Rep., *Leura* 7584
- Nicotellidae,**
feeding behavior, digestive tract morphology 496
- Nicotiana glauca,**
host plants, development, feeding, nymphs, *Corimelaena extensa*, USA, California 8290
- Nicotiana tabacum,**
pests, host plants damage, population levels estimation, *Heliothis virescens*, *Heliothis zea* 8536
- Nicotiana tabacum,**
damage, pests, *Heliothis virescens*, *Heliothis zea*, USA, Maryland 4611
- Nicotine,**
toxicity, aquatic organisms, *Insecta* 9371
- Nicrophorus,**
larvae, morphology, keys 5637
- Nicrophorus carolinus,**
foraging behavior, carrion location, colonization 5924
- Nidurbia,**
new genera, taxonomy 7974

- Nifurimox,**
pesticides, mutagenicity testing, *Drosophila melanogaster* 5476
- Niger,**
malaria, vectors, effects of man, geographical distribution, *Culicidae*, *Anopheles* 628
population density, sampling, methodology, *Glossina morsitans* 1281
resting behavior, habitat preferences, environmental factors, *Glossina* 1178
- Nigeria,**
abundance, distribution, seasonal variations, *Aedes* 2150
case reports, bovine demodicosis, domestic animals, *Demodex bovis* 6075
catching methods, trapping, population dynamics, *Glossina morsitans submorsitans*, *Glossina tachinoides* 5616
check lists, *Lepidoptera* 7108
chemical control, gammalin, *Phosphorus virescens* 3002
forests, abundance, community composition, *Isopoda* 4460
life history, sexual reproduction, development, *Empoasca dolichi* 2772
parasites infection, molecular importance, *Ceratomyx fasciatus*, *Rattus rattus* 2933
pest control, chemical control, *Insecta*, *Gossypium* 5399
pest control, insecticides, *Podagrica uniformis*, *Podagrica sjostedti* 5402
pest outbreaks new records, *Mononychellus tanajou* 3771
pest outbreaks, pest control, *Mononychellus tanajou*, *phenacoccus manihoti* 1416
pests, abundance, seasonal variations, *Sorghum*, *Atherigona soccata* 4560
pests, life cycle, control programs, *Zonocorus variegatus* 8481
surveys, *Mesostigmata* 1588
- Nigeria, Ibadan,**
surveys, parasites, *Sylepta derogata* 5938
- Nigeria, life,**
species diversity, abundance, seasonal variations, *Noctuidae* 8378
- Night,**
activity, equipment, cameras, *Insecta* 3247
activity patterns, *Apis mellifera*, USA, New York 8287
flight activity, aggregation, convergence zones, atmospheric conditions, *Insecta* 7573
flight activity, surveys, *Lepidoptera*, USA, Colorado 2791
occurrence, soil, *Cicadellidae*, USA, Pennsylvania 9104
- Nikkomycin,**
antibiotics, effects on malpighian tubules, gut, osmoregulation, *Epilachna varivestis* 5713
antibiotics, effects on osmoregulation, ultrastructure, gut, malpighian tubules, *Epilachna varivestis* 4175
- Nilaparvata lugens,**
pathogenicity, *Pacilomyces farinosus* 1001
- Nilaparvata lugens,**
biotypes, fecundity, development, effects on host plants growth, *Oryza sativa* 1288
biotypes, food preferences, selection, genetics 2340
chemical control, insecticides, population growth 6162
eggs, nymphs, parasitoids, life cycle 9136
food organisms, predation, feeding behavior, *Limnognathus nitidus* 8618
genetics, hybridization, biotypes 5489
honeydew excretion, measuring techniques, methodology 4082
host plants, genetic analysis, pest resistance, *Oryza sativa*, Japan 8462
host plants pest resistance, methodology, *Zea mays* 8537
host plants, pest resistance, *Oryza sativa* 5381
host plants, pest resistance, *Oryza sativa* 6197
host-parasite interactions, feeding physiology, reviews 5675
insecticides, methyl parathion, decamethrin, perthane, effects on, reproduction, mortality 306
larvae, survival, diets, Japan 1204
life cycle, pest control 4590
migrations, climatic conditions effects on 562
nymphs, insecticides, carbofuran, toxicity, pest control 1847
pest control, insecticides, effects on, pest outbreaks 307
pest control, repopulation, pesticide applications 6122
pest resistance, inheritance, *Oryza sativa* 5404
pest resistance, selection, *Oryza sativa* 6199
pesticide resistance, carbamate, development 320
pesticide resistance, insecticides, propoxur, permethrin, fenvalerate, strains 4222
pesticide resistance, pest control 8190
pests, bionomics 5806
pests, biotypes, population studies, population genetics 3604
population growth, insecticides effects on, decamethrin 6111
predator-prey interactions, new records, geographical distribution, *Coccinella* billeti, *Oenopia*, *Paederus fuscipes*, *Paederus melampus*, India 3565
rice ragged stunt virus, infection 7376
sex chromosomes, karyotypes, meiosis 7845
symptoms, isolation, yeasts like microorganisms 1215
vectors, rice ragged stunt virus, detection, enzyme-linked immunosorbent assay 8149
wings, morphometry, identification 5640
wings polymorphism, host plants nutritional status effects on 81
yeasts like symbionts, antibiotics effects on, mortality 8307
- Nilaparvata lugens,**
infection, *Syncephalastrum racemosum*, *Penicillium oxalicum* 1815
- Nimbecora planderi,**
new species, morphology, habitat, water quality, USA, Southeast 4845
- Nineta afghanica,**
new species, taxonomy, morphology, Afghanistan 4060
- Niphanohela,**
new genera, taxonomy, Thailand 7187
- Niphanohela banane,**
new species, new genera, taxonomy, Thailand 7187
- Niphocephus aborigensis,**
new species, taxonomy, morphology, USSR 7933
- Niphogenia,**
taxonomic revision, new species, taxonomy, morphology 6399
- Nippo lachnus pluri,**
life history, pests, fruit trees, India 4554
- Nippophydus quadrimaculatus,**
new species, new records, taxonomy, Nepal 18
- Nitritriacetic acid,**
chelation, effects on cadmium uptake, pollution indicators, *Hydropsyche* 6584
- Nitrogen,**
atmospheric conditions, effect on phosphine toxicity, *Insecta* 1050

Nitrogen, (continued)

- atmospheric conditions, effects on feeding, *Amyelois transitella*, *Plodia interpunctella* 8278.
effects of diets, survival, longevity, reproduction, *Dacus oleae* 1109.
excretion, feces, detoxification, seeds, *Caryedes brasiliensis* 3436.
food utilization, feeding, *Homoptera* 6747.
freezing, storage, semen, artificial insemination, viability, *Apis mellifera* 1877.
nutrient utilization, food quality, *Dicranotropis hamata*, *Elymana sulphurella*, *Eucelis incisus*, *Zygindia scutellaris* 3547.
nutrition, diets, *Lymantia dispar* 4150.
sediments, lakes, environmental impact, burrowing organisms, *Hexagenia* 8601.

Nitrogen uptake,

- nutrition, parasitoids, *Brachymeria intermedia*, *Coccygomimus turionellae*, *Lymantia dispar* 8326.

Nitrogen-fixing bacteria,

- symbiosis, Enterobacter agglomerans, Dendroctonus terebrans, Dendroctonus frontalis, *Ips avulsus*, 1214.

4-Nitroquinoline-1-oxide,

- use, clastogenicity methodology, embryos, *Chortophaga viridifasciata* 9412.

N-Nitrosodimethylamine,

- clastogenicity, *Drosophila melanogaster* 9413.
toxicity, pesticide resistance genes, *Drosophila melanogaster* 7048.

N-Nitrosopiperidine,

- induction chromosome aberrations, X chromosome, Y chromosome, *Drosophila melanogaster* 9019.

Noctaplectanus piliger,

- new species, taxonomy, morphology, Central America 7978.

Nocticanace taprobane,

- new species, taxonomy, morphology, Sri Lanka 7962.

Nocticanac sinaiensis,

- new species, taxonomy, morphology, Israel 4834.

Noctilio labialis,

- hosts, parasites, *Myiomyioides noctilio*, South America 10.

Noctua c-nigrum,

- taxonomic revision, new species, *Xestia dolosa*, North America 40.

Noctua prounba,

- orientation, magnetic fields, flight 8262.

Noctuidae,

- bionomics, abundance, annual variations, Czechoslovakia 9182.
check lists, species composition, German Dem. Rep. 7072.
ear, auditory perception, mechanical properties, tympanum 4976.
hemocytes, physical characteristics, taxonomy, ecophysiology 6543.
infection susceptibility, pathogens, *Nomuraea rileyi* 5736.
males, sex pheromone, organic compounds, attractancy 2592.
parasitoids, seasonal variations, host preferences, USA, Florida, 4374.
pathogens growth, trehalose, ascorbic acid effects on, *Nomuraea rileyi* 1812.
predation 9127.
species composition, abundance, USA, Michigan, Douglas L. Region 2364.
species diversity, abundance, seasonal variations, Nigeria, life 8378.
synthetic sex pheromone, attractancy 7335.
taxonomy, fauna studies, Germany, Dem. Rep. 1573.
taxonomy, morphology, synonymy 4894.

Nodamura virus,

- purification, characterization, *Lymantia dispar* 8989.

Nodopus,

- taxonomy, morphology 7951.

Nodopus tibialis,

- new species, taxonomy, morphology, North America 7951.

Nodules,

- sensors, morphology, abdomen, variation, taxonomy, Tingidae 8885.

Nomada,

- new species, taxonomy, morphology, Turkey 4028.

Nomadidae,

- systematics, synonymy 4033.

Nomada articulata,

- cleptoparasitism, effects on nesting behavior, foraging behavior, *Agapostemon virescens* 1946.

Nomada cirtasa,

- synonymy, *Nomada nigrofasciata* 4033.

Nomada faventiana,

- synonymy, *Nomada fenestrata* 4033.

Nomada fenestrata,

- synonymy, *Nomada faventiana*, *Nomada vicariol*, *Nomada rufopleurea* 4033.

Nomada fucata,

- synonymy, *Nomada fucata taeniata* 4033.

Nomada fucata melanocera,

- synonymy, *Nomada nigrofasciata* 4033.

Nomada fucata taeniata,

- synonymy, *Nomada fucata* 4033.

Nomada lineola,

- synonymy, *Nomada lineola diluta*, *Nomada lineola melanocera* 4033.

Nomada lineola diluta,

- synonymy, *Nomada lineola* 4033.

Nomada lineola melanocera,

- synonymy, *Nomada lineola* 4033.

Nomada nigrofasciata,

- synonymy, *Nomada fucata melanocera*, *Nomada cirtasa* 4033.

Nomada podagrica,

- males, morphology 4033.

Nomada rufopleurea,

- synonymy, *Nomada fenestrata* 4033.

Nomada vicariol,

- synonymy, *Nomada fenestrata* 4033.

Nomadinae,

- systematics, taxonomy 4030.

Nomenclature,

- check lists, Bruchidae 7954.
classification systems, Hymenoptera 4860.
classification systems, taxonomy, *Hydroponus* 4772.
collections, Aphididae, USA, Minnesota, University of Minnesota 7926.
revision, taxonomy, *Pompilus* 834.
systematics, *Nesaea* 839.
systematics, *Spilostethus pandurus* 7196.
taxonomic revision, *Cetoniidae* 8751.
taxonomic revision, morphology, *Hadrodactylus* 4038.
taxonomic revision, *Neoperla pallidescens*, *Neoperla apona*, *Neoperla claggi*.

Nomenclature, (continued)

- Neoperla pallidescens*, *Phanopora claggi* 8002.
taxonomic revision, *Olpium savignyi*, *Olpium kochi*, *Olpium bicolor* 7934.
taxonomic revision, *Symphyla*, Finland 7209.
taxonomic revision, synonymy, *Saidula latibellii* 6414.
taxonomic revision, synonymy, *Xyloa pendleburyi*, Oriental Region 6412.
taxonomic revision, types, *Eucolidae* 7990.
taxonomy, *Dicosus* 3985.
taxonomy, *Ecdyonurus lateralis*, *Ecdyonurus grandis*, *Ecdyonurus gridellii*, Italy 3145.
taxonomy, *Eumesosoma* 2391.
taxonomy, families, *Ephemeroptera* 4847.
taxonomy, *Laccobius campallidus*, *Laccobius arenarius*, *Laccobius spangleri* 4775.
taxonomy, morphology, *Caryocolum*, Europe 4887.
taxonomy, morphology, lectotypes, *Allygus communis* 7980.
taxonomy, *Polynema* 7987.
Taxonomy, species, *Lycanidae* 2463.
taxonomy, synonymy, *Brueelia superciliosa*, *Alcedoffula alcedinis* 5607.
taxonomy, synonymy, *Erythemis*, *Lepthemis*, *Mesothemis* 846.
taxonomy, synonymy, *Heteropini*, *Purpuriceniini* 4807.
taxonomy, synonymy, *Neoscia* 4004.
taxonomy, synonymy, *Tanytarsus bernhardi*, *Tanytarsus longitarsis* 4829.
taxonomy, synonymy, *Ulmomya*, *Clogma* 7960.
taxonomy, type specimens, *Gerridae*, India 7192.

Nomia,

- taxonomy, status, synonymy 5601.

Nomia bakeri,

- cuticles, chemical composition, organic compounds, USA, Colorado 107.

Nomia foxii,

- taxonomy, status 5601.

Nomia melanderi,

- interference competition, soil-dropping behavior, *Tetramorium caespitum* 5891.

Nomia triangulifera,

- new records, repopulation, USA, Illinois 9497.

Nomuraea rileyi,

- infection, developmental stages, pathogenesis, *Anticarsia gemmatilis* 5747.
infection effects on food consumption, food utilization, *Heliothis zea* 9134.
pathogenicity, effects on food consumption, food conversion, *Heliothis virescens* 9006.
pathogens, fungicides effects on, biological control, *Lepidoptera*, *Glycine* max 716.

Nomuraea rileyi,

- pathogens, growth, casein, trehalose effects on, *Noctuidae* 1812.
pathogens, infection, *Popillia japonica* 5737.
pathogens, infection, susceptibility, mortality, *Trichoplusia ni*, *Anticarsia gemmatilis* 5755.
pathogens, infection susceptibility, *Noctuidae* 5736.
pathogens, infection, ultrastructure, pathogenesis, *Anticarsia gemmatilis* 4208.
pathogens, susceptibility, *Bombyx mori* 8130.
pathology, immune response, *Spodoptera frugiperda* 1806.

Non-target organisms,

- (forests) soil, community composition, insecticides effects on, *Arthropoda*, USA, California 2149.

Nonarthrus cyanum,

- morphology, identification, geographical distribution, Panama 7126.

Noddyjunction,

- chromosomes, colcemid ingestion, *Drosophila melanogaster* 6263.
chromosomes, cytoplasm, genetics effects on, *Drosophila melanogaster* 4680.
chromosomes, genetics, inbreeding, *Drosophila melanogaster* 6257.
chromosomes, sex differences, inbreeding, *Drosophila melanogaster* 4679.
genetics, *Drosophila melanogaster* 3105.
genetics, *Drosophila melanogaster* 3106.

Non-target organisms,

- biological control effects on, nuclear polyhedrosis virus, granulosis virus, *Insecta* 3394.
diflubenzuron effects on, pest control, *Laspeyresia pomonella* 8562.
disease transmission control programs effects on, insecticides, wildlife management, *Glossina* 1346.
herbicides effects on, abundance, soil, *Arthropoda* 5259.
insecticides effects on, agriculture, colonies, management, *Apis mellifera*, 1433.
insecticides effects on, chemical control, blueberry shoestring virus vectors, Illinois peapen 8458.
insecticides effects on, diflubenzuron, toxicity, *Apis mellifera* 3446.
insecticides, toxicity, *Heliothis* predators 8172.
mortality, carburetor, diets, *Apis mellifera* 6201.
mortality, natural enemies, insecticides effects on, *Tetranychus turkestani* 2893.

Non-target organisms,

- parasitoids, methidathion, toxicity, *Aonidiella auranti* 9020.
pest control, *Cochliomyia hominivorax*, *Diptera*, USA, Southwest 2206.
pesticide residues effects on, soil, bioassays, *Musca domestica* 2656.
pesticide residues, host plants pollen, *Medicago sativa*, *Megachile rotundata* 8395.

Non-target organisms,

- pesticides, effects on predators, food consumption, oviposition, *Amblyseius* 5131.
pesticides, toxicity, *Aphidletes aphidimyza* 8173.
pirmipho-methyl, insecticides, effects on population levels, *Carabidae*, *Staphylinidae*, Czechoslovakia, Jerske Hory Mts. 7571.
predators, insecticides effects on, pest control, *Nilaparvata lugens* 6162.
predators, toxicity, insecticides, *Phorodon humuli*, *Apis fabae* 9028.
soil, insecticides effects on, community composition 5260.
toxicity, *Bacillus thuringiensis* kurstaki, *Apanteles glomeratus*, *Pimpla tunonellae* 7379.

Non-target organisms,

- toxicity, growth regulators, MV678, brackishwater environment 6618.
toxicity, herbicides, *Apis mellifera* 5044.
toxicity, insecticides carriers, *Chrysopa carnea*, *Hippodamia convergens*, *Aphytis melinus* 5785.
toxicity, insecticides, *Megachile rotundata* 4224.
toxicity, insecticides, *Trichogramma perkinsi*, *Trichogramma australicum* 5050.
toxicity, pesticide residues, natural enemies, *Planococcus citri* 5800.
toxicity, *Simulium* larvae, aquatic organisms, *Insecta* 9016.
toxicity tests, pesticides, predators, *Amblyseius fallacis* 5046.

Norfolk I.,

- new species, taxonomy, morphology, *Microlepidoptera* 4041.

North Africa,

- geographical distribution, taxonomy, morphology, *Hoplia* 1600.

North Africa,

- taxonomy, morphology, keys, *Dilophus* 4836.

- North America,**
 bibliographies, pests, *Oulema melanopus* 7928.
 biogeography, habitat, geographical distribution, *Euxoa* 3933.
 biogeography, taxonomy, phylogeny, new species, *Clambidae* 1576.
 check lists, nomenclature, *Bruchidae* 7954.
 classification, phylogeny, *Euxoa detera* 8839.
 coevolution, host plants, species diversity, *Apidae* 1564.
 diapause, overwintering, *Papilionoidea*, *Hesperioidea* 6880.
 Dufour's gland, chemical composition, defense secretions, volatiles, phylogeny.
Andrenidae 245.
 endangered species, population decline, conservation, *Callosamia secunifera* 2106.
 ethology, autecology, geographical distribution, *Erora laeta*, *Erora quaderna*
quaderna, *Erora quaderna sanfordi* 6329.
 fecundity, population growth, *Lymantia dispar* 1972.
 geographical distribution, *Nyxiosandrus germanus* 7919.
 host plants, crops, *Loxagrus albicosta* 6156.
Hydroporus boreus, new species, taxonomy, morphology 4774.
 identification keys, *Holcostethus* 4941.
 introduced species, geographical distribution, range, *Harpalus rufipes* 3153.
 keys, morphology, *Hyalomyzus* 5589.
 keys, *Pentatomidae* 5809.
 larvae, identification, morphology, *Ephemeroptera* 2498.
 life cycle, seasonal variations, habitat, geographical distribution, *Necrophilus*
pettiti 2771.
 morphology, taxonomy, new genera, new species, *Diploschizia* 1659.
 new records, geographical distribution 6332.
 new records, geographical distribution, *Gnatholita delineana* 9491.
 new records, geographical distribution, introduced species, life history, *Delia*
coarctata 3158.
 new records, geographical distribution, *Scymnus suturalis* 6330.
 new species, geographical distribution, *Xestia* 40.
 new species, taxonomy, morphology, *Acmopolynema sema*, *Acmopolynema miamsense*,
Acmopolynema una, *Acmopolynema unimaculatum* 2457.
 new species, taxonomy, morphology, *Eurytoma palustris*, *Eurytoma scabriterga*,
Eurytoma antistrophe, *Eurytoma euneiformis*, *Eurytoma stingsosa*, *Eurytoma orbiculata*
8825.
 new species, taxonomy, morphology, *Nodopis tibialis* 7951.
 new species, taxonomy, morphology, *Peoria padreella* 7230.
 new species, taxonomy, morphology, *Pherbellia* 5571.
 new species, taxonomy, morphology, *Siphonurus munnos*, *Pseudocloeon cestum* 4846.
 new species, taxonomy, morphology, *Spartina alterniflora* host plants, *Calamomyia*
aberrifera 3204.
 new species, taxonomy, morphology, 15 species, identification keys, *Listronotus*
6379.
 new species, 16 species, taxonomic revision, synonymy, *Lordithon* 6380.
 new subspecies, taxonomy, morphology, geographical distribution, *Dilutentomus*
filiformis mundus, *North America* 4027.
 parasites, biological control, historical account, *Chrysocentrus lacinellae*,
Coleophora lancela 3028.
 parasites, hosts, range, reviews, *Leptinus* 9498.
 population dynamics, introduced species, *Tipula paludosa* 2907.
 population genetics, *Choristoneura occidentalis*, *Choristoneura biennis*,
Choristoneura retiniana, *Choristoneura lambertiana*, *Choristoneura fumiferana*
3130.
 population genetics, genotype-environment interactions, *Nymphalis antopa* 5497.
 taxonomy, morphology, genera, synonymy, *Scotinotus* 2390.
 taxonomic revision, morphology, *Araucoschizus* 7940.
 taxonomic revision, morphology, new species, *Sesiopterus californicus*, *Sesiopterus*
depressus 2453.
 taxonomic revision, new species, taxonomy, morphology, 14 species, *Aphanistes*
6379.
 taxonomic revision, new taxa, morphology, *Disemulphus* 5549.
 taxonomy, morphology, geographical distribution, reviews, *Chrysididae* 7112.
 taxonomy, morphology, *Pherbellia* 3203.
- North America, Pacific Northwest,**
 altitudes, vertical distribution, enzymes, polymorphism, coloration, *Elaphrus*
americanus 9217.
- North America, West,**
 new species, taxonomy, morphology, *Leucodynerus samianus* 8821.
- Norvellia seminuda,**
 X disease vectors, factors affecting orchards colonization 6173.
- Norway,**
 abundance effects on population growth, *Cetraria delisei*, *Hypogastura fulbergi*
5267.
 case reports, scabies 8426.
 community composition, altitude gradients, *Araneae* 4477.
 life cycle, flight activity, feeding behavior, morphology, *Ceraclea nigronervosa*
5429.
 paleoenvironments, paleoclimatology, community composition, *Insecta* 4750.
 records, species composition, zoogeography, *Heteroptera*, *Auchenorrhyncha* 7898.
- Nosema,**
 effects on pathogens, *Galera rufa* 281.
 natural enemies, *Neochetina bruchi*, *Neochetina eichhorniae*, *Argentina* 8379.
- Nosema apis,**
 diseases, infection, *Apis mellifera*, *USA* 4194.
 infection, measuring techniques, *Apis mellifera* 6081.
 parasites, infection, quantitation, population characteristics, *Apis mellifera*
1024.
 pathogens, development, *Apis mellifera* 4210.
 spores, disintegration, parasites, *Apis mellifera* 6610.
- Nosema calcarati,**
 new species, parasites, *Pityogenes calcaratus* 9002.
- Nosema carpocapsae,**
 life cycle, pathogens, *Cydia pomonella* 2633.
 pathogens, effects on hosts fecundity, *Cydia pomonella* 2632.
- Nosema hylobii,**
 parasites, new species, infection, *Hylobius abietis* 8131.
- Nosema locustae,**
 pathogens, pest control, biological control, *Melanoplus sanguinipes* 3813.
 pathogens, pest control, *Glyptidae* 1398.
- Nosema pyraustae,**
 biological control, microsporidiosis persistence, *Ostrinia nubilalis* 8495.
 infection, association, parasitism, *Macrocercus lepidus*, *Ostrinia nubilalis*
6039.
 pathogens, pest control, transmission (transovarial), *Lepidoptera* 8125.
- Nosema pyraustae,**
 parasites, biological control, *Ostrinia nubilalis*, *USA*, *Delaware* 2033.
- Nosema pyrausta,**
 pathogens, infection, effects on population levels, *Ostrinia nubilalis* 5356.
- Nosema whitei,**
 pathogens, infection, effects on sex ratio, *Tribolium castaneum* 6036.
- Nosematidae,**
 parasitism, effects on reproduction, *Chilo sacchariphagus* 9009.
- Nothomma monstrosus,**
 parasites, host preferences, life cycle 7548.
- Nothogylus fasciatus,**
 infestation, habitat, *Musella erminea*, *New Zealand* 8332.
 parasites, feral populations, *Felis* 511.
- Nothodius pilosellum,**
 new records, *Scandinavia* 4783.
- Notaris bimaculatus,**
 life cycle, feeding effects on weed control, *Agropyron repens* 1250.
- Nothocanthocera,**
 taxonomy, morphology, keys 3202.
- Nothomyrmecia macrops,**
 allotypes variation, population structure, genetic relationship, *Australia* 3123.
- Nothopodidae,**
 12 new species, taxonomy, morphology, *India* 7136.
- Notiobia parilis,**
 dung utilization, forests, *Panama* 8370.
- Notiophilus biguttatus,**
 feeding behavior 498.
 predatory behavior, humidity, chemical stimuli, prey, capture 4359.
- Notiochaeta bufonivora,**
 taxonomy, morphology, *America* 4926.
- Notodontidae,**
 new subspecies, taxonomy, morphology, *USSR*, *Caucasus* 4043.
 taxonomy, morphology, *Africa* 4039.
- Notodreps cati,**
 infestation, pathology, case reports, *Felis rufus*, *USA*, *Texas* 3685.
- Notoncus ectatomoides,**
 volatiles, biochemical analysis 4995.
- Notonecta,**
 feeding behavior, predation, resource partitioning, habitat selection, *British*
Isles 2904.
 predatory behavior, locomotion efficiency 6231.
- Notonecta alutica,**
 tactile discrimination, sex, interspecific relationships 414.
- Notonecta glauca,**
 hindgut epithelium, histology, ultrastructure 3310.
- Notonecta hoffmanni,**
 foraging behavior, anti-predator behavior, intraspecific relationships,
 freshwater environments 7819.
 predator-prey interactions, predators stability, prey population density 3646.
- Notonecta lunata,**
 spatial distribution, developmental stages, cannibalism, ponds 7017.
- Notonecta undulata,**
 spatial distribution, developmental stages, cannibalism, ponds 7017.
- Notonectidae,**
 abundance, pathogens, ponds 1007.
 predators, biological control, vectors, disease transmission 2861.
- Notophthalmus viridescens,**
 secretions, avoidance behavior, predators, *Dytiscus verticalis* 3863.
- Notostira elongata,**
 infection, new records, pathogens, *Entomophthora erupta*, *Switzerland* 6609.
 interspecific relationships, competition, herbivores, mortality, *Megalocera*
recticornis 3631.
- Notoxus bihannensis,**
 new species, taxonomy, morphology, *Tanzania* 3982.
- Notoxus francivilleus,**
 taxonomic revision, synonymy, *Notoxus parvus*, *Notoxus sengalensis* 4803.
- Notoxus parvus,**
 taxonomic revision, synonymy, *Notoxus francivilleus*, *Notoxus sengalensis* 4803.
- Notoxus sengalensis,**
 taxonomic revision, synonymy, *Notoxus parvus*, *Notoxus francivilleus* 4803.
- Nuclear membranes,**
 proteins, isolation, characterization, embryos, *Drosophila melanogaster* 4283.
- Nuclear polyhedrosis virus,**
 Autographa californica, virulence, diets, methoprene, pest control, *Heliothis*
virescens 6967.
 bioassays, mortality, *Neodiprion sertifer* 5722.
 biological control, *Lymantia dispar* 5392.
 biological control, safety regulations, *Insecta* 3708.
 characterization, infection, *Buzaia suppressaria*, *China*, *People's Republic*, *Hunan*
Province 2649.
 digestion fluids, *Autographa californica*, *Trichoplusia* ni 5742.
 disease transmission, *Anticarsia gemmatilis*, *Bombyx mori* 277.
 disease transmission, *Spodoptera littoralis* 9279.
 DNA, infectivity, biological control, *Trichoplusia* ni 1034.
 DNA, restriction endonuclease mapping, cell culture, *Autographa californica* 5757.
 DNA, restriction endonuclease mapping, pathogens, *Spodoptera littoralis* 5758.
 effects on larvae development, susceptibility, *Heliothis armigera* 7377.
 effects on larvae mortality, *Spodoptera exempta* 268.
 effects on larvae mortality, *Trichoplusia* ni, *Gallina mellonella* 269.
 effects on molting, food consumption, larvae, *Spodoptera littoralis* 275.
 enzyme-linked immunosorbent assay, proteins, cell culture, larvae, *Insecta* 1091.
 experimental infection, effects on metabolism, *Bombyx mori* 284.
 growth, larvae, *Manestra brassicae* 4618.
 infection, *Adisura atkinsoni*, *Stomopteryx subscissella*, *Papilio demoleus*, *Phaouda*
flammans 290.
 infection, *Anomis sabulifera*, *India*, *Parbhani* 7391.
 infection, biological control, larvae, *Trichoplusia* ni 1036.
 infection, cytopathology, *Pseudaletia unipuncta* 5744.
 infection, DNA biosynthesis, RNA biosynthesis, *Bombyx mori* 3398.
 infection, DNA polymerase induction, *Trichoplusia* ni 1035.
 infection, effects on hemolymph proteins, *Heliothis armigera* 4200.
 infection, effects on lipids, hemolymph, *Spodoptera littoralis* 3411.
 infection, effects on mortality, longevity, fecundity, *Pseudaletia* includes
7390.
 infection effects on parasitoids, *Voria ruralis*, *Trichoplusia* ni 2036.
 infection, effects on proteins metabolism, *Aporia crataegi* 8987.

Nuclear polyhedrosis virus, (continued)

- infection, hosts, parasites, discrimination, *Lymantria dispar*, *Apanteles melanoscus* 5942.
 infection, mortality, *Anticarsia gemmatilis*, *Pseudoplusia includens* 1826.
 infection, mortality, *Diarsia obliqua* 7389.
 infection, nucleic acids, abdomen, *Bombyx mori* 3418.
 infection, pathology, isolation, *Spodoptera eridania* 1823.
 infection, replication, temperature effects on, *Bombyx mori* 1821.
 infection, seasonal variations, *Spodoptera frugiperda*, USA, Louisiana 5751.
 infection susceptibility, *Heliothis* zea, *Spodoptera frugiperda* 5746.
 isolation, characterization, *Galleria mellonella* 7392.
 isolation, characterization, strains, *Spodoptera* 9000.
 larvae mortality, pathology, *Spodoptera eridania* 271.
 maintenance, attenuation, cell culture, *Heliothis* zea 5743.
 marking, dispersal, survival, females, *Hyphantria cunea* 2858.
 pathogenicity, cell lines, *Orygia leucostigma* 1026.
 pathogenicity, pest control, *Lymantria dispar* 8145.
 pathogenicity, toxicity, *Agrotis ipsilon* 3402.
 pathogens, biological control, apiculture pests, *Galleria mellonella* 8456.
 pathogens, biological control, efficacy, *Ostrinia nubilalis* 8443.
 pathogens, diets, rearing, *Lymantria dispar* 3702.
 pest control, *Agrotis ipsilon*, *Zea mays* 8454.
 pest control, biological control, Alabama argriculture 5409.
 pest control, biological control, safety, public health, *Manestria brassicae* 7717.
 pest control, crop fields, *Spodoptera litura*, *Brassica oleracea capitata* 8439.
 pest control, efficacy, *Trichoplusia ni*, *Heliothis* zea 8457.
 pest control, environmental impact, population density, *Choristoneura occidentalis*, Canada, British Columbia 4589.
 plaque assay, pathogens, *Galleria mellonella* 8144.
 replication, abdomen, *Bombyx mori*, pupae 5033.
 replication, biological control, *Insecta* 3394.
 replication, cell lines, biological control, *Heliothis* 3414.
 solubility, digestion fluids, *Trichoplusia ni* 4201.
 survival, forests soil, transmission, *Orygia pseudotsugata*, USA, California 280.
 susceptibility, *Lymantria dispar*, *Manestria brassicae*, *Spodoptera litoralis* 2635.
 toxicity, adjuvants effects on, *Heliothis* zea 3450.
 toxicity, *Manestria brassicae*, Europe 2617.
 transmission, *Oecchia schellenbergii* predation, *Heliothis punctiger* larvae 1029.
 transmission, pest control, *Trichoplusia ni*, *Podium maculiventris* 3811.
 virulence, rearing, biological control, *Insecta* 3828.
 virulence, *Trichoplusia ni* 3417.
 yield, rearing, diets, *carrageenans*, *Lymantria dispar* 8008.

Nuclei

- high mobility group proteins, purification, characterization, embryos, *Drosophila melanogaster* 7473.
 micromethods, injection, eggs, *Drosophila* 8850.
 RNA, DNA hybridization analysis, larvae, *Drosophila* 6240.
 satellite DNA distribution, embryos, *Drosophila virilis* 3874.
 ultrastructure, muscles, development, *Bombyx mori* 7281.
 virus-like particles, new records, *Amyelotus transillata* 5739.

Nucleic acids

- abdomen, infection, nuclear polyhedrosis virus, *Bombyx mori* 3418.

Nucleoids

- heterogeneity, microbodies, *Aldrichia grahami* 881.

Nucleolus

- oocytes, diapause, rRNA biosynthesis, *Cordulia aenea* 2680.

Nucleolus organizer region

- activity, gene regulation, *Drosophila* 8633.
 activity, regulation, hybrids, *Drosophila mulier* 3059.
 chromosomes, activation, hybrids, *Drosophila* 5452.
 localization, banding, heterochromatin, cytogenetics, *Chorthippus jucundus* 7825.
 mutants, Y chromosome, analysis rRNA genes, *Drosophila melanogaster* 5456.
 rRNA genes, intron characterization, restriction endonuclease mapping, *Drosophila hydei* 4664.

Nucleoproteins

- meiosis, chromosomes fluorescence, spermatocytes, *Lepidoptera* 6262.

Nucleosomes

- genomes, gene mapping, *Drosophila melanogaster* 9395.

- organization, chromatin, *Drosophila* 6245.

Nucleotide sequence

- Balbiana rings genes cDNA, *Chironomus thummi* 6247.
 DNA, Balbiana rings, chromosomes, salivary gland, *Chironomus tentans* 7830.
 DNA, collagen gene, *Drosophila melanogaster* 8625.
 DNA, duplication, hybridization, *Bombyx mori* 4661.
 DNA, genes homology, transposition, *Drosophila melanogaster* 1504.
 DNA, heat shock genes, *Drosophila melanogaster*, *Drosophila simulans* 7834.
 DNA, heat shock proteins genes, *Drosophila melanogaster* 8631.
 DNA, replication, termination, DNA polymerase I, *Drosophila melanogaster* 7831.
 DNA, restriction endonuclease, sex differences, *Drosophila* 3076.
 DNA, transposon mdg3 repeated sequence, *Drosophila melanogaster* 9382.
 DNA, transposons, *Drosophila* 4669.
 DNA, transposons, *Drosophila melanogaster* 1502.
 cDNA, chorion genes, proteins, *Bombyx mori* 8630.
 cDNA, histone H3 genes, insertion sequences insertion sites, gene libraries, *Drosophila melanogaster* 8628.
 cDNA, immunoglobulin heavy chains switch regions, *Drosophila* 6251.
 cDNA, YPI gene, YPI gene, comparison mRNA, *Drosophila melanogaster* 5455.
 gene mapping, rRNA Val, genes, characterization, *Drosophila melanogaster* 4671.
 genes, DNA, plasma proteins, *Drosophila* 3876.
 genes, evolution, *Drosophila melanogaster* 7879.
 genes, mRNA, yolk proteins, ecdysone effects on transcription 4662.
 heat shock proteins, genes, *Drosophila melanogaster* 8629.
 homology, divergence, DNA hybridization, *Drosophila* 5453.
 polyribosomes, mRNA, homology, developmental stages, *Drosophila melanogaster* 1519.
 repeated sequence, DNA, *Drosophila melanogaster* 7822.
 RNA, secondary structure, splicing, *Drosophila melanogaster* 1499.
 RNA, silk gland, *Bombyx mori* 2306.
 rRNA 5S, *Acyrtosiphon magnoliae* 4686.
 rRNA 5S, relationship, evolution, *Phiosiana cyntha ricini* 8092.
 rRNA 5.8S, rRNA 28S, *Apidae* 8082.
 rRNA 5.8S, silk gland, *Bombyx mori* 4177.
 rRNA 5.8S, silk gland, *Phiosiana cyntha ricini* 8098.
 RNA Lys, *Drosophila melanogaster* 9391.
 RNA Lys genes, *Drosophila melanogaster* 9396.
 RNA, secondary structure modification, chloroacetaldehyde, *Drosophila*

Nucleotide sequence, (continued)

- melanogaster 4667.
 satellite DNA, distribution, nuclei, embryos, *Drosophila virilis* 3874.
 transposon 412 repeated sequence, *Drosophila melanogaster* 9381.
 venom, peptide synthesis, *Vespadie* 961.
- Nucleotides**
- chemical stimuli, blood meals, feeding behavior, *Rhodnius prolixus* 5930.
 chemotaxis, larvae, *Culex pipiens quinquefasciatus* 7334.
- Nucleus**
- spermatogenesis, electrodense material, *Melipona* 5097.
- Nudaurelia B virus**
- characterization, pathology, *Dasychira pudibunda* 1827.
- isolation, antigenic characteristics, *Nudaurelia cythera capensis* 5035.
- Nudaurelia cythera capensis**
- isolates, antigenic characteristics, viruses 5748.
- isolation, antigenic characteristics, *Nudaurelia B virus* 5035.
- Numenius americanus**
- hosts, parasites, Mallophaga, USA, New Mexico 3581.
- Nupedia plicatura**
- new species, morphology, China, People's Rep 813.
- Nurse cells**
- development, oogenesis, *Ephestia kuehniella* 5098.
- Nutrient availability**
- host plants, effects on development, *Pieris rapae*, *Spodoptera eridania*, *Brassica nigra* 5960.
- Nutrient content**
- forests, canopies, *Arthropoda*, USA, North Carolina 2144.
- Nutrient cycles**
- ecophysiology, forests, phytophagous *Insecta* 7593.
- leaf litter decomposition, soil fauna, *Arthropoda*, USA, Alaska 5989.
- Nutrient cycling**
- grasses, detritus, soil macroorganisms, *Arthropoda*, USA, Wisconsin 2287.
- Nutrient deficiencies**
- pyridoxine, vitamins, survival, development, larvae, *Heliothis virescens* 1744.
- Nutrient deficiencies**
- antibiotics, chloramphenicol, effects on hemolymph, *Apis mellifera* 8110.
- Nutrient dynamics**
- enzyme activity, soil fauna, *Isopoda*, *Diplopoda* 9368.
- phosphorus, sewage effluents, streams, community structure, *Insecta*, USA, Virginia 7814.
- Nutrient enrichment**
- community composition, insects, salt marshes, herbivores, *Spartina* 2290.
- pollution effects, streams, *Trichoptera*, *Diptera*, *Plecoptera*, *Ephemeroptera*, USA, Apalachian Mts 7815.
- Nutrient levels**
- association, *Arthropoda*, *Drosophila erythrorhiza*, Australia 7555.
- Nutrient loss**
- host plants, predators effects on, *Agromyza frontella*, *Medicago sativa* 552.
- leaf litter, soil fauna, tundra, *Arthropoda*, USA, Alaska 5989.
- Nutrient release**
- environmental impact, grazing, respiration, fungi, *Oryctolagus cuniculus* 2796.
- Nutrient requirement**
- apiculture, *Apis mellifera* 4591.
- Nutrient requirements**
- cell culture, rat body cells, *Manestria brassicae* 876.
- effects on feeding behavior, *Phytophaga*, *perissulius*, *Amblyseius degenerans* 1206.
- host-salivary gland secretion, *Trypanosoma*, *Glossina morsitans* 983.
- rearing, *Nephrotettus cincticeps* 856.
- sterols, synthetic diets, apiculture, *Apis mellifera* 1407.
- vitamins, cell lines, *Penicillium americana* 877.
- Nutrient sources**
- diets-proteins, sucrose, effects on locomotor activity, *Anthonomus grandis* 8376.
- Nutrient uptake**
- digestive tract, fluids, *Schistocerca gregaria* 2553.
- minerals, digestive tract, diets, *Schistocerca gregaria* 2552.
- Nutrient utilization**
- acetic acid, *Drosophila* 8075.
- energy budget, developmental stages, *Oryzaephilus surinamensis* 173.
- nitrogen, food quality, *Dicranostropus hamata*, *Elymana sulphurella*, *Eucelis unicus*, *Zygmatis scutellaris* 3547.
- pests, genotypes, *Zea mays*, *Sitophilus oryzae* 4358.
- Nutrients**
- casein, cholesterol, glucose, development, fecundity, *Coryca cephalomca* 7452.
- decomposition, forest floor litter, *Arthropoda* 2114.
- diets, growth index, larvae, *Coryca cephalomca* 7467.
- effects on feeding behavior, colonial characteristics, *Solenopsis invicta* 1991.
- feeding stimulation, host selection, *Gastrophysa atrocynae* 486.
- foliage, pests infestation effects on, *Tetranychus urticae*, *Arachis hypogaea* 3704.
- food plants, phenols, herbivores, *Anacardium melanorhodon* 7308.
- glucose, diets, phospholipid composition, *Euxestus roborator* 3313.
- 10-hydroxydecanoic acid, sterols, larvae, *Apis mellifera* 5889.
- matting, survival, cold tolerance, *Tatohia* 6698.
- symbiosis, host plants, *Cecropia*, *Formicidae* 4398.
- Nutrition**
- amino acids, growth, hemolymph, larvae, *Bombyx mori* 2709.
- diets, nitrogen, *Lymantria dispar* 4150.
- digestive tract, enzymes, *Sarcophaga albiceps* 7311.
- digestive tract, physiology, *Periplaneta americana* 4992.
- ecology, physiology, behavior, environmental changes, *Insecta* 4464.
- effects on chemoreception, odors, *Phormia regina* 7530.
- effects on, ontogeny, development, mouthparts, *Cyrtolipha* 381.
- food conversion, bibliographies, *Insecta* 4757.
- food conversion, pests, forests, *Gilpinia berycinia* 7696.
- glucose, diets, phospholipid composition, *Euxestus roborator* 3313.
- 10-hydroxydecanoic acid, sterols, larvae, *Apis mellifera* 5889.
- inulinic acid, diets, *Manestria configurata* 8079.
- nitrogen uptake, parasitoids, *Brachymeria intermedia*, *Coccygnomus turionellae*, *Lymantria dispar* 8326.
- pest control, *Tribolium confusum* 8078.
- physiology, diets effects on, food plants, *Spodoptera eridania* 5677.
- reproduction, milk production glands, histochemistry, *Melipotaphis ovinus* 3389.
- worm borers, *Crioceris syriacus*, *Rhagothrips inquisitor*, *Ergates faber* 4344.
- Nutritional status**
- host plants, effects on wings polymorphism, *Nilaparvata lugens* 81.
- 246

- Nutritive value,**
food organisms, effects on growth, reproduction, *Myzus persicae*, Aphidoletes aphidimyza 5678
spermatophores, selection pressure, comparison, *Heliconius charitonius*, *Dryas julia* 773.
- Nuts,**
attractants, oviposition traps, *Ameloyella transitella* 6170.
Carya, new records, habitat, *Euryvoccus bianchardii* 5907.
pests, chemical control, *Helopeltis antonii*, Sri Lanka 677.
- Nuttallidae,**
cuticle, structure, function, reviews 5658
- Nycteribia kolenatii,**
geographical distribution, new records, Sweden 3946.
- Nycteribia latreillei,**
new records, hosts, *Myotis emarginatus* 7903.
- Nycteribia pedicularis,**
geographical distribution, new records, Sweden 3946
- Nycteribia schmidlii,**
new records, hosts, *Pleocotus auritus* 7903
- Nycteribiidae,**
geographical distribution, new records, Sweden 3946.
species composition, parasites, Chiroptera, Czechoslovakia 7903.
surveys, geographical distribution, Philippines 1579.
- Nycteriboscinae,**
morphology, keys, geographical distribution, Philippines 871
- Nycticorax nycticorax,**
hosts, parasites, *Opthalmogonatus tenorioae*, USA, Hawaii 795.
- Nyctophylla,**
taxonomy, reviews 6382.
- Nyctophyllis oculatus,**
morphology, taxonomy, synonymy 6382
- Nymphaea elegans,**
pollination, flowering, Insecta, USA, Texas 5209.
- Nymphalidae,**
dispersal, habitat 7594.
- Nymphalis antiopa,**
population genetics, genotype-environment interactions, North America 5497
- Nymphalis antiopa hyperborea,**
phenotypes, adaptations, canalization 7878
- Nymphes,**
new species, taxonomy, morphology, Australia 3227.
- Nymphobidae,**
taxonomic revision, Australia 3227
- Nymphoides cristatus,**
host plants, feeding damage, regeneration, Insecta 6801.
- Nymphs,**
catching methods, *Ixodes persulcatus* 7257
development, nests, synchronization, *Odoitornis stercorivorus* 6997
development, temperature effects on, *Chelidonia vittiger* 6644
development, temperature effects, *Onus insidiosus* 1865
diets, habitat selection, streams, phenology, *Stenocranus interpunctum*, *Stenonema pulchellum* 3052
disease transmission, *Babesia microti*, *Dermacentor marginatus*, *Dermacentor reticulatus*, *Haemaphysalis punctata*, *Rhipicephalus sanguineus*, *Ixodes hexagonus* 8418.
distribution, host plants, *Hibiscus esculentus* okra, *Amrasca biguttula biguttula* 5298.
drift, population density, diel activity, *Azalephlebioides*, Australia 754.
feeding behavior, migrations, *Desmoma bethula*, USA, California, Sagehen Creek 3688.
feeding, mother-offspring interactions, *Periphaera* 2746.
food conversion efficiency, *Locusta migratoria* 4901.
growth, development, morphology, *Dialeurodes dissimilis* 7432.
growth, Ephemeroptera, Sweden, Ricklean R. 3850.
growth, ethylene effects on, *Melanoplus sanguinipes* 4264
infestation, effects on growth, *Malus*, *Magpica* 6126.
integument structure, molting hormones, *Ornithodoros moubata* 3340
leprosy, acute, infection, *Penicillium oxalicum* 1815.
Leptoglossus corculis, color, dominance, green 1789
Limnococtus insularis, *Cryptococcus laevis*, streams, flooding, environmental effects, abundance, Costa Rica 2294
morphology, development, *Connelaena extensa*, USA, California 8290
morphology, ecological distribution, *Lednia humana* 42.
morphology, identification keys, Cicadelloidea, Europe 4935.
morphology, insular, *Ornithodoros toledoi* 4933.
morphology, keys, taxonomy, *Diploperla*, *Diploperla duplicata*, *Diploperla murgani* 1674.
morphology, *Perlinodes aurea* 8037.
morphology, *Proctodryinus punctatus* 6480.
Nilaparvata lugens, pest control, insecticides, carbofuran, toxicity 1847
Ornithodoros savignyi, *Ornithodoros megnini*, *Argas persicus*, infestation, livestock 2041
parasites, morphology, *Freyana anatina anatina* 8030.
parasites, morphology, *Tyroboreus* lin 8029.
parasitoids, life cycle, *Nilaparvata lugens*, *Gonatella furcifera* 9136.
substrate preferences, habitat selection, *Hexagenia bilineata* 3853
toxicity, diflubenzuron, *Melanoplus sanguinipes* 6628.
- O'a'Yong-yong virus,**
isolation, vectors, *Anopheles funestus*, Kenya 1466.
- Nystagmus,**
visual evoked response, head movements, *Tenebrio molitor* 151.
- Observation methods,**
feeding behavior, *Limothrips* 4363.
- Oboliscia vryzae,**
surveys, *Orscolia vryzae*, China, People's Rep 1013
- Ocalcheifer,**
synonymy, *Levicheifer* 5552.
- Ocales jordanica,**
new species, Jordan 3187.
- Occurrence,**
abundance, breeding, *Heliothis peliterra*, British Isles, England, Sussex 5992
abundance, Lepidoptera, British Isles, Scotland 6705.
abundance, pheromone traps, *Hyलगоринус rufipes*, *Scolytus tsugae*, Canada 1183
- Occurrence, (continued)**
Aedes vexans nipponii, USSR, Georgia 9461.
Anara myrtilli, Hungary, Balaton Upland 8686.
Araneae, *Porfomoma pygmaea*, Sweden 4717.
geography, Bohriidae, Africa, South 9486.
bogs, peatlands, Microlepidoptera, Czechoslovakia 9481.
Coleophora hydrolapatella, Netherlands 9478.
Coleophora machinella, British Isles, England 9446.
Colias hyale, *Colias crocea*, Sweden 4719.
community composition, Opetidae, *Platyzeidae*, Czechoslovakia 2358.
Conistra rubiginosa, British Isles 9445.
crop fields, *Myzus persicae*, *Brevicoryne brassicae*, *Hyadaphis erysimi*, *Macrosiphum euphorbiae*, USA, California 9349.
Diamemus osculans, Australia, New South Wales 9502.
geographical distribution, *Agonopterix astrantiae*, British Isles, Wales 6299.
geographical distribution, *Allopynerus koenigi*, France, Spain 9458.
geographical distribution, Aphididae, India 8688.
geographical distribution, *Argas robertsi*, *Ornithodoros savignyi*, *Otobius megnini*, India, Tamil Nadu 9216.
geographical distribution, *Cicindela*, Canada 9496.
geographical distribution, *Cnaphalocrocis medialis*, Japan 9475.
geographical distribution, Diptera, Czechoslovakia 3937.
geographical distribution, *Euphyes bimaculata*, USA, North Carolina 8690.
geographical distribution, historical account, *Coleoptera*, Sweden 3941.
geographical distribution, *Leioderus kollari*, France 9472.
geographical distribution, Microlepidoptera, Inner Hebrides Is. 6315
geographical distribution, *Oreilia falcata*, *Dithyrea guttaris*, British Isles 6310.
geographical distribution, *Perlamantus aliberti*, France 9459.
geographical distribution, *Phyllotreta*, Canada, Saskatchewan 5531.
geographical distribution, *Polistes gallicus*, Belgium 9484.
geographical distribution, *Polydorus inustus*, France 9457.
geographical distribution, *Polyphya*, Mexico, Baja California 5532.
geographical distribution, *Vespula germanica*, *Vespula vidua*, Canada, Manitoba 3931.
gynandromorphism, *Sergentomyia minuta*, *Sergentomyia dentata*, Greece 8882.
habitat, *Coleoptera*, France 9470.
habitat, forests, *Formica rufa*, France, Alsace 9466.
habitat, *Vanessa cardui*, British Isles 5910.
hives, apiculture, *Megachile lateralis*, *Megachile nivalis*, Canada, Saskatchewan 4603.
Insecta, Greece, Rhodes, Crete 9471.
introduced species, indigenous species, *Psocoptera*, Hawaii 7888.
introduced species, Insecta, Eire 9451.
introduced species, wood, *Platyopidae*, Israel 9464.
keys, *Canacidae*, Israel 4834.
males, life cycle, *Megastigmus pictus*, Poland 9110.
man, case reports, *Boophilus decoloratus*, *Rhipicephalus evertsi evertsi*, South Africa 1367.
migrants, Lepidoptera, Eire, Cork Co. 9453.
migrations, Lepidoptera, British Isles 9449
migrations, Lepidoptera, Eire 7885.
new records, damage, host plants, *Orseolia*, *Panicum miliare* 1242.
new records, forests, ornamental plants, *Thysanoptera*, Israel 9479.
new records, Insecta, Eire 9454.
new records, *Ipomophora retusa*, British Isles, England, Cornwall Co. 9443.
new records, Microlepidoptera, British Isles 9448.
new records, *Nomia triangulifera*, USA, Illinois 5528.
new records, *Rhinoscius brazilensis*, Brazil 6502.
Oryctes nasicornis, Sweden 4539.
Pachynematus arcticus, British Isles, Scotland 9452.
parasites, bees, *Aeroglyphus robustus*, *Apis mellifera* 2026.
parasites, biological control, *Lydella thompsoni*, *Ostrinia nubilalis*, USA, Delaware 2033
parasites, *Varroa jacobsoni*, USA, Maryland 3760
pests, *Apis mellifera* nests, *Pseudohylocera keneszi*, Colombia 1315.
pests, records, egg production, *Leptinotarsa decemlineata*, British Isles 1440.
phenology, morphology, *Colias cesonia*, USA 7269
population status, *Cicindela columbica*, USA, Idaho, Salmon R. 7120.
Psocoptera, Israel 8841
records, geographical distribution, aquatic environment, *Simulium defoliarti*, *Prosimulium onychodactylum*, USA, California, San Geronimo Mts. 1572.
records, geographical distribution, *Coreitarsus*, Asia, Australia 1581.
seasonal variations, annual variations, species composition, *Trichoptera*, *Conisidae*, Finland 8673
seasonal variations, cattle, *Amblyomma*, Argentina 9265
seasonal variations, crop fields, *Carabidae*, *Staphylinidae*, Sweden, Uppsala 4543.
seasonal variations, *Diatraea grandiosella*, USA, Texas 9102.
seasonal variations, environmental surveys, *Lonchoptera lutea*, *Lonchoptera furcata*, British Isles, England 3559
seasonal variations, larvae, *Rachiplusia ou*, *Autographa biloba*, USA, Florida 1294
seasonal variations, pests, *Sesuidae*, USA, Mississippi 3786.
soil, night, *Cicadellidae*, USA, Pennsylvania 9104.
species composition, *Bombus*, Poland, Pulawy 9476.
species composition, *Calyptraea*, British Isles, England, West Bromwich, Sandwell Valley 9444.
species composition, *Carabidae*, France, Cerdagne 9473.
species composition, *Lepidoptera*, British Isles, Scotland, Kirkcudbrightshire 9447
species composition, *Lepidoptera*, Yugoslavia, Slovenia 9455
species composition, *Orthoptera*, British Isles, Scotland 6307.
species composition, summer, *Lepidoptera*, Finland 7896
species composition, *Symphyla*, Crete 6427.
stored products, pheromone traps, *Pyralidae*, Czechoslovakia 9294
streams, acid rain, *Siphonurus lacustri*, *Heptagenia lateralis*, British Isles, Scotland 8607
survival, *Coniferales* plantations, *Magpica* 6161
taxonomy, morphology, *Xyleborini*, Hawaii 7165
taxonomy, *Stenomema mexicana*, Panama 3166.
water salinity, *Stratomyus longicornis*, Dead Sea 9375.
Wesmaelius helveticus, Hungary 8675.
- Ocelli,**
effects on flight activity orientation, *Acrididae* 149
effects on flight activity orientation, timing 150
membrane potential, synapses, neurons, brain, *Locusta* 4961

- Ocelli, (continued)**
neurons, visual perception, effects on orientation, *Schistocerca americana* 909.
photoreceptors, phototaxis, *Drosophila* 2539.
taxonomy, morphology, *Isometeoris* 5579.
- Ochetina bruchi**,
biology, host specificity, aquatic plants, Argentina 2053.
- Ochropleura fusca**,
geographical distribution, new records, British Isles 6302.
- Ochthebius**,
taxonomy, morphology 5559.
- Ochthebius ineditus**,
new species, taxonomy, morphology 5559.
- Oecomysomermis musgratii**,
parasites, infectivity, salinity effects, *Culicidae* 266.
- Ocotipamile**,
biosynthesis, ganglia, *Locusta migratoria* 2524.
effects on adenylate cyclase activity, hemolymph, *Malacosoma distria* 8976.
hyperlipidemia, hemolymph, *Locusta migratoria* 174.
neurons receptors, *Limulus*, *Periplaneta americana* 130.
neurotransmitters, hormones, modulators, reviews, *Insecta* 4127.
- Ocotipamile receptors**,
motor neurons, regeneration, muscles, leg, *Periplaneta americana* 8912.
- Ocotipamile herbivora**,
new genera, new species, taxonomy, morphology, Tonga 6388.
- Odagmia ornata**,
vectors, *Ochocerca taricola*, *Cervus elaphus* 662.
- Odocoileus bemonius**,
nasal infection, parasites, larvae, *Cephenemyia* 518.
- Odonata**,
avoidance behavior, predation, environmental conditions 1289.
check lists, geographical distribution, Mozambique 7107.
check lists, species composition, France, Serignan 7074.
check lists, species composition, 30 species, India, Uttar Pradesh, Pithoragarh District 8689.
flight activity orientation, ocelli effects on 149.
flight activity, periodicity, seasonal variations 4440.
geographical distribution, coastal zone, population structure, Australia, Queensland 4457.
identification keys, morphology, New Zealand 6503.
new taxa, bibliographies 7930.
pairing, mate selection, interspecific relationships 3522.
species composition, community structure, habitat, USA, Ohio, Grand R. 3854.
surveys, geographical distribution, population studies, Czechoslovakia, Muran Highlands 2357.
toxicity, *Simulium* larvicides, nontarget organisms 9016.
- Odonotacarus mitchelli**,
Acari, new species description, Papua New Guinea 6.
- Odonotella jermiei**,
new species, taxonomy, morphology, Lesser Antilles 6386.
- Odonotocula**,
taxonomic revision, nomenclature, types 7990.
- Odonotocerus albicornis**,
life cycle, growth, development, British Isles, England 4660.
- Odonotodroma**,
taxonomy, morphology 5548.
- Odonotermes**,
pest outbreaks, crop fields, damage, India, Punjab 5370.
- Odonotermes distans**,
digestive tract, enzymatic activity, chitinase, symbionts 926.
pH, digestive tract, hydrogen ions 1747.
taxonomy, geographical distribution, swarming behavior, nests 467.
- Odonotermes formosus**,
termaria construction, colonies, development 2781.
- Odonotermes gurdaspurensis**,
mounds, architecture, India, Haryana 7801.
pests, damage, plantations, Eucalyptus, India 7700.
- Odonotermes horai**,
mounds, architecture, India, Haryana 7801.
- Odonotermes microdentatus**,
mounds, colonial characteristics, fungus gardens 5424.
- Odonotermes obesus**,
mounds, architecture, India, Haryana 7801.
pests, damage, plantations, Eucalyptus, India 7700.
trail pheromone, purification, characterization 8972.
- Odonotermes obesus**,
digestive tract symbionts, cellulose digestion, *Cunninghamella echinulata* 4364.
- Odonotermes stercorivorus**,
nymphs development, nests, synchronization 6997.
- Odonotermes wallonensis**,
foraging behavior, annual variations, environmental factors, India 4347.
- Oder**,
potentiation, overshadowing, color, *Apis mellifera* 5874.
- Odors**,
antifeedants, repellents, chemical composition, mimicry, *Metriorhynchus rhipidius* 1785.
attractancy, carbon dioxide, acetone, *Glossina morsitans morsitans*, *Glossina pallidipes* 6084.
chemoreception, age, nutrition, *Phormia regina* 7530.
host plants, orientation, *Pala rosea*, *Daucus carota* 8264.
hosts, parasites olfaction, *Hymenoptera*, *Dendroctonus frontalis* 4912.
olfactory stimuli, habituation, nestmates, males, *Lasioglossum zephyrum* 9075.
recognition, olfactory discrimination, nest mates, *Lasioglossum zephyrum* 3359.
- Odynerus dieticus**,
predators, nest building, collection, storage, prey, *Hypera* 7524.
- Odynerophaga**,
man, venom, stings, *Vespidae* 8177.
- Oebalus pugnax**,
host plants, crop fields, *Sorghum vulgare* 2097.
infestation, effects on yield, *Sorghum* 6164.
pests, feeding damage, *Sorghum* 8506.
- Oecanthus celerinictus**,
stridulation, energy metabolism, oxygen consumption 5021.
- Oecanthus quadripunctatus**,
stridulation, energy metabolism, oxygen consumption 5021.
- Oecetis avara**,
morphology, taxonomy, ecological distribution, identification 8004.
- Oecetis brignolii**,
new species, Turkey 4066.
- Oecetis disjuncta**,
morphology, taxonomy, ecological distribution, identification 8004.
- Oecchia schellenbergii**,
predation, nuclear polyhedrosis virus transmission, larvae, *Heliothis punctiger* 1029.
- Oeciatus vicarius**,
vectors, rearing, culture systems, colonization 3692.
- Oecophoridae**,
herbivores, phototoxicity, *Umbelliferae*, *furunculocummaris*, USA, New York 2079.
- Oecophylla longinoda**,
association, effects on ecological distribution, *Cataulacus guineensis*, Ghana 578.
- Oedaeus**,
taxonomy revision, identification keys 1670.
- Oedignathia campestris**,
new species, taxonomy, morphology, Brazil 8735.
- Oedipodinae**,
pest control, pathogens, baiting 1398.
- Oedoparona minor**,
new species, taxonomy, morphology, Japan 7185.
- Oenanthe isabellina**,
parasites, migrations, environmental conditions, *Protophylla frontalis* 9147.
- Oenopla**,
predator-prey interactions, *Nilaparvata lugens*, new records, geographical distribution, India 3565.
- Oenothera albicaulis**,
damage, larvae feeding behavior effects on, *Hyles lineata* 543.
- Oesophagomyia lithobolii**,
gut microflora, *Mynapoda* 8306.
- Oestromyia leporina**,
mouthparts, morphology, histology 83.
- Oestrus ovis**,
ophthalmomyiasis, case reports, USA, California 7644.
- Ogmaura la**,
taxonomy, morphology, keys, *Curculionidae*, *Rhynchophoridae* 3979.
- Ogryis genoveva**,
colonies, predation, *Indomyrmex purpureus* 5244.
- Oli**,
vapors, *Blumea eriantha*, effects on reproduction, *Earias vittella* 7454.
- Olis**,
collection structure, functional morphology, *Anthophoridae* 91.
colonies, food preferences, *Solenopsis invicta* 1992.
disease control, pest control, vectors, viruses, crop fields, *Aphididae* 7697.
feeding deterrents, pests, *Anthonomus grandis* 2252.
pest control, crop fields, *Callosobruchus chinensis* 2261.
pest control, host plants, *Bruchus chinensis*, *Passolous aureus* 6929.
plant extracts, antifeedants, *Thuja plicata*, *Phasodolus strobil*, *Alica ambiens* 4352.
scent gland, biochemical analysis, *Oncopeltus fasciatus*, *Pyrrhocoris apterus* 3377.
Trachyspermum ammi, effects on metamorphosis, mortality, *Aedes aegypti* 6623.
- Okinawa**,
new species, morphology, *Blattella asahana* 804.
pest outbreaks, life tables, crop fields, *Saccharum officinale*, *Mogania minuta* 6109.
- Oktanusa lobatus**,
taxonomy, new species, new genus, morphology, geographical distribution, new records, Korea 2447.
- Olabidocarpus pleociti**,
morphology, *Chiropora* parasites, Belgium 5652.
- Olea europaea**,
orchards, pests, population dynamics, *Dacus oleae*, Crete 7798.
- Olethreutinae**,
taxonomy, morphology, Madagascar 843.
- Olfaction**,
antennal sensilla, genetic factors, inheritance, *Apis mellifera* 7060.
host plants detection, larvae, *Diabroica virgifica virgifica* 4413.
host searching behavior, feeding behavior, *Glossina* 1201.
hosts odors, parasites, *Hymenoptera*, *Dendroctonus frontalis* 4912.
orientation, host plants odors, *Pala rosea*, *Daucus carota* 8264.
pheromones catabolism, antennae, enzymatic activity, *Trichoplusia ni* 4168.
pheromones degradation, enzymatic activity, cuticle, *Trichoplusia ni* 4169.
pheromones enantiomers, electrophysiological recording, antennal sensilla, *Dendroctonus frontalis* 4313.
sensilla, blood sucking, *Diptera*, *Phthiria* 2532.
sexual behavior, sexual maturity, *Pseudohyaleius nebulosus* 2739.
visual stimuli, host searching behavior, *Glossina* 1202.
- Olfactory communication**,
pheromones, mandibular glands, *Myrmica* 5867.
sex pheromone, attractancy, *Heliothis punctigera* 5871.
social behavior, castes, colonial characteristics, *Lasioglossum zephyrum* 6216.
- Olfactory discrimination**,
odors, recognition, chemoreception, nest mates, *Lasioglossum zephyrum* 3359.
- Olfactory perception**,
antennal sensilla, morphology, age, *Apis mellifera* 915.
antennal sensilla, ultrastructure, *Calliphora vicina* 6529.
attractants, repellents, host plants, *Caviaria aegodiphi* 2056.
dehydration, water content, effects on, volatiles, chemotaxis, *Eucelatoria*, *Hibiscus esculentus* 432.
lemon oil components, electrophysiological recording, antennae, *Periplaneta americana* 7295.
pheromones, electroantennograms, *Ostrinia nubilalis* 1739.
pheromones, strains, effects on behavior, *Trogoderma granarium* 1157.
prey kairomones, *Amblyseius fallacis*, *Phytoseiulus macropilis* 2156.
sex pheromone, electroantennograms, *Spodoptera littoralis* 1738.
- Olfactory preferences**,
host plants genotypes, *Gossypium*, *Earias vittella* 9080.
- Olfactory stimuli**,
conditioned response, unconditioned response, amines effects on, brain, *Apis mellifera* 6687.
flight activity, orientation, chemoreception, atmospheric conditions, *Insecta* 5130.

Olfactory stimuli, (continued)

- host plants, effects on feeding behavior, *Dendroctonus frontalis*, Pinus taeda 1941.
- host plants, effects on phototaxis suppression, *Bombyx mori* 3300.
- host searching behavior, parasitoids, hosts, *Sitona hispidulus*, *Patasson lameeri* 7537.
- odors, habituation, nestmates, males, *LasioGLOSSUM zephyrum* 9075.
- plant extracts, Avena, aggregation, attractancy, *Oryzaephilus surinamensis* 6700.
- role, social behavior, dominance, *Nauphoeta cinerea* 8596.
- volatiles, *Hibiscus esculentus*, *Gossypium*, parasites, *Eucelatoria* 4321.
- Oliarus ecologus**, abundance, seasonal variations, plantations, USA, North Carolina 1313.
- Oliarus quinqueleatus**, abundance, seasonal variations, plantations, USA, North Carolina 1313.
- Oligella**, entomofauna, identification, keys, Sweden 3977.
- Oligella intermedia**, new species, taxonomy, morphology, Sweden 3977.
- Oligella nana**, new species, taxonomy, morphology, Sweden 3977.
- Oligia**, geographical distribution, phenology, collections, Hungarian Natural History Museum, Palearctic Region 8674.
- Oligocene** epoch, fossils, Insecta, USA, Colorado 3168.
- Oligoneura borythetica**, new records, ecological distribution, Czechoslovakia, Latorica R. 2355.
- Oligonychus coffeae**, host plants, new records, *Phylaxis minima* 9151.
- Oligonychus ilicis**, life history, population dynamics, infestation, *Ilex crenata*, USA, New Jersey 444.
- Oligonychus milleri**, life history, temperature effects on development, survival 8283.
- Oligonychus pratensis**, host plants, pest resistance, *Sorghum bicolor* 8549.
- pest control, insecticides, efficacy, USA, Texas 1473.
- pest resistance, characterization, *Sorghum bicolor* 4588.
- Oligonychus pusillae**, feeding, damage, leaves, *Persea americana* 6165.
- Oligonychus senegalensis**, new species, taxonomy, morphology, Senegal 8713.
- Oligonychus subaesus**, life history, temperature effects on development, survival 8283.
- Olios**, predation, food organisms survival, body size, effects on, *Eleutherodactylus coqui* 1293.
- Oliarianus balli**, sexual reproduction, host plants, vectors, *Mycoplasma*, Jamaica 5892.
- Olliffella craticola**, galls, abundance, *Torrotirps kotzabai*, *Quercus emoryi* host plants 4422.
- Olpium bicolor**, taxonomic revision, nomenclature 7934.
- Olpium kochi**, taxonomic revision, nomenclature 7934.
- Olpium minutum**, taxonomy 5553.
- Olpium savignyi**, taxonomic revision, nomenclature 7934.
- Oman**, population studies, ecological distribution, races, *Apis mellifera* 5216.
- predation, population regulation, *Hipparchia pansatis* 5215.
- Omerini**, taxonomy, morphology, new species, new genera 4786.
- Omicrus milleri**, new species, taxonomy, morphology 4786.
- Omicrus unctanai**, new species, taxonomy, morphology 4786.
- Omonadus florale**, surveys, West Indies 1612.
- Omphalocytis platysai**, gut microflora, Myriapoda 8306.
- Onchocerca tarsicola**, parasites, transmission, Diptera 662.
- Onchocerca voluvis**, disease control, epidemiology, mapping, computers, Africa, Volta R. Basin 6068.
- pathogens, disease control, vectors eradication, *Simulium naevai*, Kenya 1327.
- vectors, rearing, *Simulium damnosum* 5058.
- Onchocerciasis**, control programs, geographical distribution, *Simulium*, Senegal 9249.
- disease control, epidemiology, mapping, computers, Africa, Volta R. Basin 6068.
- vectors, breeding sites recolonization, pest control, *Simulium damnosum*, Ivory Coast 5269.
- vectors, chemical control, insecticides, larvae, *Simulium ornatum*, *Simulium cunium* 5053.
- Oncideres guttata**, morphology, larvae, pupae 6487.
- Oncideres pustulata**, girdles, habitat, coexistence, 19 species, Cerambycidae 5981.
- Oncidocampa falcipera**, cavernicolous species, new genera, new species, Spain, Santander, Tresviso 4824.
- Oncometopia nigricans**, population dynamics, distribution, citrus blight vectors, USA, Florida 6174.
- Oncopeltus**, metamorphosis, life history, body size effects on 1956.
- Oncopeltus cingulifera**, disease transmission, wilt, Trinidad 5414.
- Oncopeltus fasciatus**, brachypterism, genetic analysis 6291.
- development energetics, migration effects on 2783.
- diets, effects on fatty acid composition 6586.
- embryos, molting, scanning electron microscopy 868.
- epidermis, segments, gap junctions, membrane permeability 8901.
- hysteresis proteins, biochemical analysis, hemolymph 1756.
- juvenile hormones analogs, sensitivity glands molting, cell death 8245.
- juvenile hormones, precocene II, effects on, embryogenesis 2703.

Oncopeltus fasciatus, (continued)

- makisterone A effects on cuticle synthesis, vitellogenesis inhibition 3487.
- midgut, permeability, cardiac glycoside 7310.
- molting hormones, larvae, characterization 2582.
- molting, metamorphosis, physiology effects on 3517.
- pest control, molting inhibition 9287.
- rearing, food sources, seeds collection equipment 8025.
- scent gland oils, biochemical analysis 3377.
- toxicity, topical applications, 2-acetylpyridine thiosemicarbazones, molting inhibition 5786.
- Oncorhynchus kisutch**, fry, food organisms, immature stages, Chironomidae 2131.
- Oncosomoecha besucheti**, new species, new genera, taxonomy, morphology, Lebanon 7164.
- Oniscoides**, soil fauna, population dynamics, seasonal variations, Czechoslovakia 7599.
- surveys, Poland 788.
- Oniscus asellus**, heavy metals, bioaccumulation, pollution levels, British Isles 8186.
- molting, developmental stages, cuticle excretions 4273.
- Onitis**, predation, parasites biological control, *Taenia saginata*, Kenya 1317.
- Onitis alexis**, interspecific relationships, biological control, survival, *Musca vetustissima*, Australia 1308.
- Onitis belial**, nesting behavior, nest building, larvae survival 6661.
- Onitis ion**, nesting behavior, nest building, larvae survival 6661.
- Onthophagus**, hosts, symbionts, new species, *Cosmetolaelaps* 800.
- Scarabaeus*, elimination, man, India 9258.
- Onthophagus australis**, predators, developmental stages, mortality, *Musca vetustissima*, Australia 2880.
- Onthophagus binodis**, interspecific relationships, biological control, survival, *Musca vetustissima*, Australia 1308.
- population density, effects on reproduction, dung dispersal 7609.
- Onthophagus ferox**, interspecific relationships, biological control, survival, *Musca vetustissima*, Australia 1308.
- Onthophagus gazella**, adults body size effects on reproduction, nest building, manure degradation 2897.
- parasites, *Physcephalus sexalatus*, *Ascarops strongylina*, *Gongylodema pulchrum*, USA, Georgia, USA, Texas 9203.
- population density, fecundity, manure availability 5997.
- Onthophagus granitatus**, predators, developmental stages, mortality, *Musca vetustissima*, Australia 2880.
- Onthophagus ruficapillus guianensis**, new subspecies, taxonomy, morphology, Iran 7171.
- Onthogeny**, catalase, genetic control, *Zaprionus parvittiger* 8653.
- developmental stages, embryogenesis, *Dolichovespa saxonica* 6636.
- gills, larvae, *Euphaeidae* 6538.
- hemolymph biochemistry, environmental effects, stress, *Spodoptera exigua* 3371.
- lactate dehydrogenase activity, *Drosophila melanogaster* 8955.
- nutrition, effects on, development, mouthparts, *Cyclorhapha* 381.
- Oncyrtus subtenius**, environmental impact, grazing, nutrient release, respiration, fungi 2796.
- Oncyromyrmex**, chemical communication, trail pheromone, sternal gland, morphology 8977.
- Oncychophora**, embryology, development 3459.
- Oncythys cretatus**, biology, host specificity, aquatic plants, Argentina 2053.
- Onymacris plana**, hydrocarbons, biochemical characteristics, taxonomy 5687.
- Onymacris rugatipennis**, hydrocarbons, biochemical characteristics, taxonomy 5687.
- Onymacris unguicularis**, osmoregulation, water balance, drought tolerance 8104.
- Oocytes**, bioaccumulation, lipids, hemolymph, vitellogenesis, *Locusta migratoria* 395.
- cells interaction, oogenesis, *Rhodnius prolixus* 393.
- cytoplasmic streaming, follicles, *Drosophila* 7476.
- degeneration, aging, fecundity, *Plodia interpunctella*, *Ephesia cautella* 9062.
- development, ultrastructure, *Hypodema* 5096.
- development, vitellogenesis, *Jonesipilis splendens* 9061.
- diapause, rRNA biosynthesis, *Cordulia aenea* 2680.
- DNA repair, mutants, radiation damage, chromosomes, spermatozoa, *Drosophila melanogaster* 6261.
- hemolymph proteins uptake, *Cryodes peregrinus* 4271.
- ion exchange, electroporation, *Locusta migratoria* 1134.
- ovaries, development, morphology, cytology, *Rhodnius prolixus* 326.
- radioreadsorption, vitellogenesis, *Locusta* 2715.
- radioresistance, genetic factors effects on, radiation, *Drosophila melanogaster* 2346.
- suppressors, mutation, spermatocytes, *Drosophila ananassae* 3098.
- Oocytes**, ultrastructure, juvenile hormones.
- Ooencyrtus clisioampae**, parasitoids, infestation, eggs mortality, *Malacosoma americanum* 8314.
- Ooencyrtus kuvanae**, parasites, population studies, sampling methodology 2821.
- Ooencyrtus patriciae**, eggs, parasitoids, Africa 2814.
- Oogenesis**, aging methods, population structure, *Culicoides variipennis variipennis* 4081.
- antennae amputation effects on, *Acanthoscelides obscura* 5824.
- biochemistry, embryogenesis, maternal effects, reviews, *Insecta* 5837.
- blood-meals, age, *Culicoides* 9059.
- cell cycle, corpora allata, juvenile hormones, *Diptera punctata* 2710.
- cells interaction, *Rhodnius prolixus* 393.
- cholesterol, incorporation, ecdysteroids, ovary, eggs, *Schistocerca americana* 211.
- corpora allata regulation, hormones, *Diptera punctata* 3494.

Oogenesis, (continued)

- cytoplasmic streaming, follicles, *Drosophila* 7476.
development, o radiation effects on, *Dacus cucurbitae* 2705.
diets effects on, *Coccinella septempunctata* 1114.
diets effects on, proteins, *Culex pipiens pallens* 5819.
diflubenzuron effects on, *Oxya japonica* 5767.
ecdysterone, vitellogenesis, *Aedes aegypti* 5088.
enzymatic activity, alkaline phosphatase, *Culex pipiens fatigans* 1886.
feeding behavior, *Culicoides melles*, *Culicoides hollensis* 2009.
follicles junctions development, *Rhodnius prolixus* 1130.
genes, α -tubulin transcription, *Drosophila melanogaster* 6242.
growth regulators, azadirachtin, effects on, *Locusta migratoria* 377.
growth regulators effects on, allosid, dimilin, *Culex pipiens* 1042.
histopathology, pest control, insecticides, tepa, *Culex pipiens fatigans* 1835.
hormones, females, starvation effects on, *Labidura riparia* 966.
inhibition, pheromones effects on, *Solenopsis invicta* 390.
mutants, tumorigenesis, *Drosophila melanogaster* 3093.
neuroendocrine system, *Aedes aegypti*, *Aedes taeniorhynchus* 5832.
neuroendocrine system effects on, *Camponotus lateralis* 2706.
nurse cells development, *Ephesia kühniella* 5098.
ovary, follicles, morphology, *Musca domestica* 2708.
plant extracts, chemical stimuli, *Zea mays*, *Sitotroga cerealealis* 4270.
precocene II effects on, *Oxya japonica* 1115.
precocene effects on, progeny, *Glossina moritans moritans* 5093.
protein biosynthesis, *Drosophila melanogaster* 394.
proteins, hemolymph, *Rhynchosciara americana* 3516.
proteins incorporation, *Locusta migratoria migratorioides* 1887.
proteins, vitellogenin, *Diploptera punctata* 1847.
RNA biosynthesis, mRNA, poly (A)-containing, poly (A)-lacking, *Calliphora erythrocephala* 8244.
role, 20-hydroxyecdysone 3511.
starvation, juvenile hormones mimics effects on, *Labidura riparia* 1116.
vitellogenesis, histology, *Lucilia cuprina* 2668.
vitellogenesis, temperature-sensitive mutant, *Drosophila melanogaster* 2334.
yolk, chemical composition, histochemistry, proteins, *Sarcophaga ruficornis* 1083.
- Ogonia**,
chromosomes, Deltocephalinae 3087.
- Ootheca mutabilis**,
Mecynotus, biological, disease transmission, mosaic disease, *Vigna unguiculata*, Africa, West 547.
- Operopthera brumata**,
pest control, forests, predators, Aves 3037.
predation effects on larvae population density, *Operopthera brumata* 565.
- Operopthera occidentalis**,
history, development, overwintering, USA, Oregon 822.
- Opitidae**,
new records, geographical distribution, occurrence, community composition, Czechoslovakia 2358.
- Ophiogomphus acuminatus**,
taxonomy, morphology, new species, Tennessee 3229.
- Ophiogomphus carolinus**,
synonymy, *Ophiogomphus incurvatus* 8001.
- Ophiogomphus incurvatus**,
synonymy, *Ophiogomphus carolinus* 8001.
- Ophiogomphus incurvatus alleghaniensis**,
new subspecies, taxonomy, morphology 8001.
- Ophiomyia pearlivera**,
new species, morphology, Japan 2419.
- Ophiomyia simplex**,
population dynamics, bionomics, host plants, *Asparagus officinalis*, USA, Massachusetts 6134.
- Opobius rufipes**,
pests, Triticum, USSR, Ukraine 6919.
- Opirocystis hybidi**,
parasites, life cycle, infection, malpighian tubules, *Hylotus abietis* 5726.
- Opirothamnatus tenorioae**,
new species, parasites, *Nycticorax nycticorax*, USA, Hawaii 795.
- Opmyra leucostoma**,
warning behavior, flight activity 8288.
- Oplae receptors**,
binding, enkephalin analogs, midgut, *Leucophaea maderae* 8911.
- Oplinae**,
check lists, species composition, taxonomy, zoogeography, synonymy, new records, geographical distribution, Hungary 8687.
- Oplia seneciacea**,
phenology, host plants, *Dacus opliae*, Australia 3626.
- Oplio ravennae**,
geographical distribution, German Dem. Rep. 4720.
- Opliones**,
population dynamics, species composition, crop fields, German Dem. Rep., Leipzig 1571.
surveys, crop fields, insecticides, effects on community composition, Sweden 4459.
- Opioids**,
receptors, nervous system, *Leucophaea maderae* 2525.
- Opiathacanthus cayaporum**,
geographical distribution, habitat, feeding behavior, Brazil 5220.
- Opius**,
parasitoids, *Hydrellia valida*, USA, Florida, *Oyster Bay* 3621.
- Opius canaliculatus**,
parasitism, pupae, *Rhagoletis pomonella*, USA, Connecticut 2819.
- Opius downsi**,
parasitism, pupae, *Rhagoletis pomonella*, USA, Connecticut 2819.
- Opiomyzidae**,
occurrence, geographical distribution, Czechoslovakia 3937.
- Opius**,
new species, Greece 7142.
new species, taxonomy, morphology, Tahiti, Fiji, Philippines 7139.
- Opius getica**,
taxonomy, new species, morphology 3.
- Opius nodosa**,
abundance, soil properties effects on, plantations 5249.
- Opiella distincta**,
taxonomy, new species, morphology 3.
- Opiella nova**,
soil fauna, autecology, mining land reclamation, British Isles, England 8597.
- Optic ganglia**,
neurons, morphology, ultrastructure, *Apis mellifera* 6525.
- Optic lobe**,
neurosecretion, cytology, histology, *Poecilotherium pictus*, *Periplaneta americana*, *Belostoma indicum*, *Polistes hebraeus*, *Sandrocotus dejeani* 4180.
- Optical properties**,
Compound eyes, eye lens, *Scarabeidae* 134.
cornea, compound eyes, ultrastructure, *Apis mellifera* 144.
- Optomotor response**,
electrical stimulation, ganglia, flight, *Calliphora erythrocephala* 894.
flight activity, visual stimuli, compound eyes, *Apis mellifera* 4981.
- Oral administration**,
Dermatophagoides pteronyssinus, sensitization, treatment, hypersensitivity, man 8434.
- Orbivirus**,
infection, *Ixodes umac* 3396.
- Orchards**,
agricultural practices, pollination, *Osmia lignaria propinqua* 5343.
Aonidiella auranti pest control, effects on community structure, *Formicidae* 2879.
citrus blight vectors, distribution, *Cicadellidae*, USA, Florida 6174.
colonization, X disease vectors, *Cicadellidae* 6173.
control programs, sterile-release, *Cydia pomonella*, Canada, British Columbia 3815.
damage, pests effects on, *Carva ulmionas*, *Curculio caryae* 2221.
ectoparasites, *Tetranychidae*, *Prunus amygdalus*, USA, California 1391.
insecticides effects on nontarget organisms, toxicity, colonies, *Apis mellifera* 3446.
Malus, community structure, species composition, *Coccinellidae* 9190.
parasitism, annual variations, *Phylloxera vitae*, *Crataegella*, USA, Connecticut 5943.
pest control, cybexatin, *Panonychus ulmi* 9300.
pest control, integrated control, *Tetranychidae*, *Malus pumila* 8517.
pest control, pesticide resistance, reviews, *Malus*, *Insecta* 7727.
pest control, *Prunus amygdalus*, *Tetramorium caespitum*, *Solenopsis xyloni*, USA, California 6907.
pest control, toxicity tests, pesticides, *Ambliseius bibens* 2664.
pest outbreaks, damage, *Amyelorus transnelli*, *Pastacia vera* 6105.
pest outbreaks, leaves damage, *Phylloxera vitae*, *Crataegella*, USA, Connecticut 3024.
pest outbreaks, *Pseudococcus maritimus*, *Pyrus communis*, USA, Washington 8498.
pests, integrated control, ecological evaluation, *Malus*, *Insecta* 7730.
pests, parasites, *Monellia caryella*, *Carva pecan*, USA, Texas 6155.
pests, population dynamics, *Dacus oleae*, *Olea europaea*, Crete 7798.
pests, population dynamics, *Malus*, *Lithocolletis biancardella*, Switzerland 6918.
pests, predators efficiency, environmental factors, *Malus*, *Panonychus ulmi* 8398.
plum pos virus vectors, flight activity, *Arbidae* 3835.
pollination, agricultural practices, *Osmia lignaria propinqua* 6933.
pollination, dispersal, *Osmia lignaria propinqua* 5342.
pollination, economic analysis, apiculture, *Apis mellifera* 1408.
pollination, nest building, agricultural practices, *Osmia lignaria propinqua* 6935.
pollinators, introduced species, dispersal, population establishment, *Osmia lignaria propinqua* 9295.
population dynamics, pests, *Prunus persica*, *Grapholita molesta*, Brazil 6034.
predator-prey interactions, spatial distribution, population dynamics, predators, *Pvlla pyri*, *Panonychus ulmi* 6211.
sampling, interspecific relationships, cluster analysis, stratification, *Aphididae* 6466.
soil fauna, community composition, distribution, *Arthropoda* 7008.
vegetation patterns effects on vectors abundance, X disease, *Cicadellidae* 3836.
- Orchelimum fidicinium**,
eggs, parasites, *Macrolelela surcoufi*, USA, Florida 5187.
- Orchelimum gladiator**,
mating behavior, aggressive behavior, sound production (biological) 1151.
- Orcheisia cincta**,
population structure, age composition, seasonal variations 6001.
reproductive strategy, activity, energetics 6843.
water balance, water requirements, effects on habitat selection 2604.
- Orcheisia villosa**,
water absorption, coxal vesicles, salinity effects 3365.
- Oreutes rhinoceros**,
biological control, pathogens, baculovirus, Western Samoa 6184.
- Oreodomyia albertae**,
taxonomy, morphology 8792.
- Orellia fausta**,
geographical distribution, occurrence, British Isles 6310.
- Orellia occidentalis**,
life history, predators, seeds, *Cirsium canescens* 5884.
predators, seeds, life history, destruction, population density, *Cirsium canescens* 9105.
- Oreothalia**,
taxonomic revision, genera, Nearctic Region 2426.
- Oreothalia chilicotti**,
new species, taxonomy, morphology, Nearctic Region 2426.
- Oreothalia sierrae**,
new species, taxonomy, morphology, Nearctic Region 2426.
- Oreothalia spinitarsis**,
new species, taxonomy, morphology, Nearctic Region 2426.
- Oreotragus oreotragus**,
hose, *Ixodes matoji*, Zimbabwe 519.
mating behavior deposits, aggregation behavior, *Ixodes matoji*, Zimbabwe 12.
- Organ culture**,
antigens, immunotherapy, hypersensitivity, *Triatoma protracta* 4522.
- Organelles**,
cells, fat body, larvae, *Protophormia terrestris* 102.
effects on chromosomes orientation, meiosis, *Drosophila melanogaster* 1519.
proteins distribution, heat shock, Kc cells, *Drosophila* 7838.
- Organic compounds**,
attractancy, methylcyclohexanol, *Blattella germanica* 2593.
attractancy, sex pheromone, males, *Lepidoptera* 2592.
biosynthesis, sex pheromone, (Z)-9-tricosene, *Musca domestica* 229.
cuticles, alkanes, alkenes, *Hymenoptera*, USA, Colorado 107.
cuticles, chemical composition, *Diaperhorma femoralis* 109.
cuticles, chemical composition, sex differences, *Musca domestica* 108.
hydrocarbons, biochemistry, chemical ecology, reviews, *Insecta* 5655.
secretion, post-pharyngeal gland, queens, *Solenopsis invicta* 987.

- Organic matter,**
detritus processing, prairies, soil microorganisms, Arthropoda, USA, Wisconsin 2287
detritus, streams, pollution effects, insecticides, Insecta 7820
soil, feeding behavior, *Jonespeltis splendens* 9129
soil properties, *Psammotermes hybostoma* 6017
- Organization,**
central nervous system, effects on flashing patterns, *Photinus versicolor* 265.
- Organs,**
neurosecretion, ultrastructure, abdomen, *Rhodnius prolixus* 251
- Orgilus elasmopalpi,**
parasites, *Elasmopalpus lignosellus*, USA, Texas 3577
- Orgilus lepidus,**
parasites, incidence, *Phthorurnea operculella*, Australia, Queensland 2828
- Orgilus nitidus,**
new records, parasitism, *Elasmopalpus lignosellus*, USA, Texas 3577
- Orgyia antiqua,**
sampling, pheromone traps 5614
- Orgyia leucostigma,**
pathogenicity, nuclear polyhedrosis virus, cell lines 1026
- Orgyia pseudotsugata,**
defoliation, effects on stands community structure, Coniferales, USA, Idaho 3601
eggs, parasites, *Telenomus californicus* 2014
nuclear polyhedrosis virus, rearing, virulence, biological control 3828
pathogenicity, nuclear polyhedrosis virus, larvae 1026
pest control, pathogens, baculovirus 7371
transmission, nuclear polyhedrosis virus, USA, California 280
- Orgyia recens,**
sampling, pheromone traps 5614
- Orgyia thyellina,**
sampling, pheromone traps 5614
- Oribatia,**
decomposition, leaf litter 2133
food organisms, food preferences, Nicolettiellidae 496
freezing, cold tolerance, alpine environments, Austria, Alps 3553
infection, parasites, *Amoebida*, *Helicospiridium parascicum* 5756
new records, geographical distribution, soil, India, Orissa 9487
population levels, environmental effects, land use, USSR, Kolkhida 7010
taxonomy, geographical distribution, India 7151.
- Oribatia,**
population dynamics, mathematical models 6837.
- Oribatida,**
new species, new genera, taxonomy, morphology, Greece 7142.
- Oribatidae,**
abundance, community composition, soil properties effects on, India, West Bengal 5250
soil fauna, species composition, population density, Japan 8600
surveys, India, Darjeeling 6349
surveys, new records, new species, India, Bhutan 6346
- Oribelia,**
new species, Greece 7142.
- Oriskania,**
new species, Greece 7142
- Oriental Region,**
geographical distribution, morphology, *Paraliris kriebbaumeri*, *Paraliris truncatus*, *Paraliris sycorax* 9490
new species, taxonomy, morphology, *Minotocyphus eximius*, *Minotocyphus flavifrons*, *Minotocyphus obscurus*, *Minotocyphus rauenensis*, *Minotocyphus sericatus*, *Minotocyphus tuberosus* 8826
new species, taxonomy, morphology, *Tharra sawakensis* 8807
taxonomic revision, identification keys, geographical distribution, bionomics, 8 species, *Paraedes* 6410
taxonomic revision, nomenclature, synonymy, *Xylota pendleburyi* 6412
taxonomic revision, reclassification, *Rachionotoma*, *Tricholeptomysia*, *Tripteroides* 6394
- Orientalism,**
anemotaxis, chemical stimuli, flowers, *Hadena bicruris*, *Deilephila elpenor* 5866
auditory stimuli, *Gryllus bimaculatus* 5863
chromosomes, organelles effects on, meiosis, *Drosophila melanogaster* 1519
combs, apiculture, *Apis mellifera* 5319
flight activity, effects on flight activity spikes, Acrididae 150
flight activity, ocelli effects on, Acrididae 149
flight activity, olfactory stimuli, atmospheric conditions, Insecta 5130
food sources, locomotor activity, foraging behavior, *Rhodnius prolixus* 5926
foraging behavior, navigation behavior, *Apis mellifera* 5865
gravity receptors, sensilla, *Arenivaga* 2538
homing behavior, *Polistes gallicus* 5114
homing behavior, wind, *Polistes gallicus*, Italy 1262
host plants, chemotaxis, sense organs, larvae, *Hylemyia antiqua* 913
host plants, feeding behavior, gustatory stimuli, *Dendroctonus ponderosae* 4303
landing behavior, phototaxis, *Scaptomyza aetulus* 1926
larvae, host plants, *Atherigona soccata* 4563
light, polarization, *Apis mellifera* 7507
locomotion, Arthropoda 5862
locomotion, sex pheromone effects on, *Periplaneta americana* 4307
magnetic fields, flight, *Nocua pronuba* 8262
magnetic fields, geotaxis, *Apis mellifera* 3537
magnetic fields receptors, *Apis mellifera* 3302
mating behavior, *Heliothis virescens* 1900
navigation behavior, light polarization, *Apis mellifera* 8263
nest building, food preferences, *Hemades truncorum* 4453
nests, feeding experience, *Paravespa vulgaris* 6695
neurons, gravity sensitivity, *Gryllus* 895
olfaction, host plants odors, *Psila rosea*, *Daucus carota* 8264
oviposition, host plants susceptibility, pests, *Chilo partellus* 7680
sex pheromone, attraction, males, *Periplaneta americana* 4302
sex pheromone, sexual behavior, females, *Plodia interpunctella* 5840
sky, display, wagtail dance, food sources, *Apis florea* 8267
sunlight, thermoregulatory behavior, *Frontella communis* 463
sunlight, thermoregulatory behavior, *Gynaephora rossii* 5906
U.V. radiation effects on, *Plea leachi* 6232
visual evoked response, eye, *Musca domestica* 135
visual perception, flight activity, *Musca domestica* 1155
visual perception, ocelli neurons, *Schistocerca americana gregaria* 909
visual perception, tracking, mathematics, *Musca domestica* 412
- Orientation, (continued)**
visual preception, color, light, *Trialeurodes vaporariorum* 8265
visual stimuli, flight, *Drosophila hydei* 5864
webs, solar radiation, effects on, thermoregulation, *Microthraena gracilis* 1918.
- Orienting response,**
males, sex pheromone, *Periplaneta americana* 2760.
- Origin,**
geographical distribution, taxonomy, Chrysidoidea, Neotropical Region 2374.
wings, evolution, Insecta 774.
- Oriocharabus latrellianus,**
morphology, mouthparts, geographical variations, altitude, Italy, Novara 7073.
- Orius,**
predators, vectors, blueberry shoestring virus, disease control, insecticides, *Ilinoia peppen* 4630.
- Orius insidiosus,**
abundance, Glycine max crop fields 2164.
diapause termination, temperature, photoperiod effects on 5816.
oviposition, eggs, abundances, crop fields, Glycine max 5322.
oviposition, site selection, host plants 9069.
population levels, host-parasite interactions, predator-prey interactions, *Sericothrips variabilis* 1253.
predation, biological control, pests, *Sericothrips variabilis* 2138.
predators, eggs, mortality, *Empoasca fabae* 6046.
predators, feeding behavior, prey, *Rhinocyllus conicus*, USA, Virginia 1200.
predatory behavior, predator-prey interactions, *Sericothrips variabilis* 3613.
temperature effects, development, nymphs, eggs 1865.
- Orius tristicolor,**
abundance, movements, agricultural practices effects on, crop fields 6198.
oviposition, site selection, host plants 1894.
toxicity, methyl parathion, toxaphene 1830.
- Ormenoides venusta,**
life history, immature stages, laboratories 1985.
- Ornamental plants,**
nectar source, apiculture, *Apis mellifera*, Israel 7714.
occurrence, new records, Thysanoptera, Israel 9479.
pest control, natural enemies, *Pulvinarella mesembryan themi*, *Pulvinaria deltoidea*, USA, California 9316.
pests, abundance, *Lepidosaphes tapleyi*, Egypt 6955.
pests, abundance, *Lindingaspis rossi*, Egypt 7650.
pests, dispersal, *Hyadaphis tatarica*, *Lonicera*, USA 7793.
pests, infestation, abundance, *Rhabdophrys picipes* 1429.
pests, population dynamics, *Macrosiphum rosae*, *Macrosiphum roseaeformis* 4530.
- Ornithodoros toledoi,**
morphology, instars, nymphs 4933.
- Ornithodoros coriaceus,**
disease transmission vectors, cattle, Chlamydia 8413.
- Ornithodoros maritimus,**
viruses, isolation, France, Brittany 4188.
- Ornithodoros megnini,**
nymphs, infestation, livestock 2041.
- Ornithodoros moubata,**
experimental infection, disease resistance, *Rickettsia akari* 8994.
experimental infection, *Rickettsia*, pathogenicity, guinea-pigs 9234.
infestation, immune response, Leporidae 6881.
nymphs, integument structure, molting hormones 3340.
Rickettsia tsutsugamushi infection, spotted fevers, transmission 9233.
- Ornithodoros savignyi,**
nymphs, infestation, livestock 2041.
- Ornithodoros savignyi,**
disease transmission, Chikungunya virus 1380.
occurrence, geographical distribution, India, Tamil Nadu 9216.
- Ornithodoros moubata,**
osmoregulation, blood meals osmotic pressure effects on 231.
- Ornithomya rupe,**
new species, taxonomy, morphology, Switzerland, Gibraltar 6405.
- Ornithomyia ancinurella,**
ectoparasites, *Pediceptes phasianellus*, Canada, Manitoba 1230.
- Ornithonyssus,**
activity patterns, atmospheric conditions effects on, gases, *Ornithonyssus* 1937.
- Ornithonyssus bacoti,**
dermatitis, case reports, man 1363
ectoparasites, *Mus musculus* 513
hosts, parasites development, *Litomosoides carini* 2634.
- Ornithonyssus bursa,**
identification, infestation, poultry, Philippines 2925.
- Ornithonyssus garrdoi,**
new species, taxonomy, morphology, Cuba 8720.
- Ornithonyssus sylvarum,**
ectoparasites, *Pediceptes phasianellus*, Canada, Manitoba 1230.
poultry ectoparasites, chemical control applications, fate 1387.
poultry ectoparasites, chemical control, food additives 1397.
poultry pests, chemical control 1452.
- Orobancha crenata,**
host plants, infestation, *Phytomyza orobanchiae*, Egypt 6812.
- Orobittacus obscurus,**
new genera, new species, taxonomy, morphology, USA, California 6450.
- Orobittacus tianshanicus,**
new species, morphology, geographical distribution, USSR 16.
- Oropsylla alaskensis,**
parasites, new records, Mammalia, USA, Alaska 4743.
- Oropsylla arctomya,**
parasites, new records, Mammalia, USA, Alaska 4743.
- Orphnephila,**
genitalia, morphology, Europe 2428
- Orseolia,**
damage, host plants, new records, occurrence, *Panicum miliare* 1242
- Orseolia oryzae,**
chemical control, insecticides, carbofuran, diazinon, quinalphos, efficacy 7771.
chemical control, phenyl carbamates 2994
galls, pest resistance, breeding, *Oryza sativa* 5407
parasites, surveys, China, People's Rep. 1013.
pest resistance, plant breeding, varieties, *Oryza sativa* 522
population density, spatial distribution, crop fields, agricultural practices effects on, *Oryza sativa* 6947
- Orsodacne,**
morphology, systematics 2394

- Orthetrum austentii**, predation, food organisms, Lepidoptera 4437.
- Orthetrum brunneum**, rare species, new records, Austria, North Tyrol 7070.
- Orthetrum triangulare triangulare**, wings, venation 6512.
- Orthocladus**, karyotypes, phylogeny 2407.
- Orthocladus bipunctatus**, karyotypes, phylogeny, taxonomy 2408.
- Orthocladus consobrinus**, temperature effects, emergence, USA, Mississippi 750.
- Orthocladus**, karyotypes, phylogeny 2407.
- Orthocladus bipunctatus**, morphology, taxonomy, karyotypes 6411.
- Orthocladus consobrinus**, toxicity, pH, metals, ponds, Canada, Northwest Territories 6696.
- Orthoglyphotermes lasignis**, new species, taxonomy, morphology, Brazil 6443.
- Orthogonis andamanensis**, new species, taxonomy, India 4001.
- Orthobalarache utenensis**, parasites, hosts, *Eumetopias jubatus*, *Phoca vitulina*, *Phoca largha*, USA, Alaska 4385.
- Orthobalarache diminuta**, parasites, hosts, *Eumetopias jubatus*, *Phoca vitulina*, *Phoca largha*, USA, Alaska 4385.
- Orthocobolus nipponicus**, new species, Japan 805.
- Orthopelmis brevicornis**, new records, geographical distribution, Sweden 4724.
- Orthopodomyia silva**, larvae, habitat preferences, ecological distribution, USA, Ohio 1951.
- Orthopodomyia pulchripalpis**, abundance, surveys, Yugoslavia 3939.
- Orthopodomyia signifera**, larvae, habitat preferences, ecological distribution, USA, Ohio 1951.
- Orthotermus ornatus**, mutualism, gut microflora, cellulose digestion 8308.
- Orthotermes**, biomass, diurnal variations, grasslands, USSR 9198.
- Orthotermes**, geographical distribution, species composition, habitat, Scandinavia 6318.
- Orthotermes**, habitat selection, vegetation patterns, grasslands, USA, Texas 6853.
- Orthotermes**, mating behavior, aggressive behavior, sound production (biological) 1151.
- Orthotermes**, species composition, British Isles, Scotland 6307.
- Orthotermes**, pathogens, life history, Sporozoa 5025.
- Orthotermes**, peripheral nerves, nerve 3B, ultrastructure, strand receptors, trachea, coxa 8067.
- Orthotermes**, species composition, abundance, USA, Nevada 3155.
- Orthotermes erosus**, vectors, plant diseases, Veticicliadiella alacris 7648.
- Orthotylus delicatus**, parasites, synonymy, *Orthotylus heidemanni* 32.
- Orthotylus heidemanni**, parasites, synonymy, *Orthotylus delicatus* 32.
- Orthotylus nasutus**, new records, geographical distribution, Canada 4741.
- Orthotylus viridiviridis**, new records, geographical distribution, Canada 4741.
- Orxines mackloti**, eggs, morphology 7267.
- Oryzias**, baculovirus, replication, cell culture, Heteronchus arator, Spodoptera frugiperda, Aedes albopictus 880.
- Oryzoceros sciralis**, parasites, Sorex cinereus, Sorex longirostris 9149.
- Oryctes nasicornis**, pest outbreaks, Sweden 4539.
- Oryctes rhinoceros**, biological control, baculovirus infection, Tonga 1822.
- Oryctes**, biological control, pathogens, baculovirus, Metarhizium anisopliae, Western Samoa 5348.
- Oryctolagus cuniculus**, pest control, wildlife management.
- Oryza sativa**, host plants, pest resistance, *Nephotettix cincticeps* 3004.
- Oryza sativa**, breeding, pest resistance, galls, *Orseolia oryzae* 5407.
- Oryza sativa**, crop fields, flight activity, Delphacidae, Cicadellidae 6711.
- Oryza sativa**, crop fields, insecticides effects on population growth, *Nilaparvata lugens* 6111.
- Oryza sativa**, crop fields, pests, population density, agricultural practices effects on, *Orseolia oryzae*, *Scirpophaga incertula* 6947.
- Oryza sativa**, crop fields, repopulation, pest control, pesticide applications, *Nilaparvata lugens* 6122.
- Oryza sativa**, crop fields, rice tungro virus, vectors, *Nephotettix virescens* 7647.
- Oryza sativa**, crop protection, integrated control, economics, insecticides, Philippines 5391.
- Oryza sativa**, cultivars, pest resistance, *Lisoterpus oryzae* 6129.
- Oryza sativa**, crop fields, pest outbreaks, *Delphacidae*, *Cicadellidae* 6711.
- Oryza sativa**, genetic analysis, pest resistance, *Nilaparvata lugens*, Japan 8462.
- Oryza sativa**, host plants, growth, biotypes effects on, *Nilaparvata lugens* 1288.
- Oryza sativa**, host plants, pest resistance, *Nilaparvata lugens* 5381.
- Oryza sativa**, host plants, susceptibility, feeding, *Nephotettix virescens* 8569.
- Oryza sativa**, leaves, feeding, larvae, *Pseudaleia unipuncta* 5949.
- Oryza sativa**, pest resistance, host plants, *Nephotettix cincticeps* 3589.
- Oryza sativa**, pest resistance, inheritance, *Nilaparvata lugens* 5404.
- Oryza sativa**, pest resistance, selection, *Nilaparvata lugens* 6199.
- Oryza sativa**, pest resistance, yield, *Nilaparvata lugens* 6197.
- Oryza sativa**, pests defoliation effects on yield, *Pseudaleia unipuncta* 8489.
- Oryza sativa**, pests, ecological distribution, population density, *Nephotettix cincticeps*, Japan 2142.
- Oryza sativa**, pests, new species, *Oligonychus senegalensis*, Senegal 8713.
- Oryza sativa**, pests, succession, population growth, insects, India 7783.
- Oryza sativa**, plant breeding, varieties, pest resistance, *Orseolia oryzae* 522.
- Oryza sativa**, rice ragged stunt virus vectors, infection, *Nilaparvata lugens* 7376.
- Oryza sativa**, rice tungro virus, disease transmission, vectors, *Nephotettix virescens* 7661.
- Oryza sativa**, stored products, pests, reproduction, *Sitophilus oryzae*, *Tribolium castaneum* 7679.
- Oryza sativa**, (continued) varieties, pest resistance, genetic analysis, *Sogatella furcifera*, *Oryza sativa* 9280.
- Oryza sativa**, vector-borne diseases, viruses, epidemiology, Insecta 9275.
- Oryza sativa**, viruses, disease transmission, *Laodelphax striatella* 1384.
- Oryzaephilus mercator**, mutation, pigmentation, eye, inheritance 5470.
- Oryzaephilus surinamensis**, cold acclimation, temperature effects, coma, oxygen consumption 3369.
- Oryzaephilus surinamensis**, developmental stages, energy budget, nutrient utilization, production, assimilation 173.
- Oryzaephilus surinamensis**, olfactory stimuli, plant extracts, Avena, aggregation, attractancy 6700.
- Oryzaephilus surinamensis**, pest control, stored products, air flow 6092.
- Oryzaephilus surinamensis**, pest control, stored products, growth regulators 3787.
- Oryzaephilus surinamensis**, pesticide resistance, malathion, temperature effects, susceptibility 1058.
- Oryzaephilus surinamensis**, pests, stored products, chemical control, growth regulators, CGA-28772 9331.
- Oryzaephilus surinamensis**, pests, stored products, growth regulators, CGA-28772 6103.
- Oryzaephilus surinamensis**, pests, stored products, pesticide resistance, Switzerland 6921.
- Oryzaephilus surinamensis**, stored products pests detection, traps 3783.
- Oryzaephilus surinamensis**, stored products pests, vertical distribution, oxygen, carbon dioxide effects on 1445.
- Oryzaephilus surinamensis**, toxicity, methyl bromide, phosphine 1073.
- Oryzaephilus surinamensis**, stored products pests, chemical control 5354.
- Oscillation**, circadian rhythms, mathematical models, *Drosophila* 1741.
- Oscillation**, leaves vibrations, communication, *Cupressus salicifolia* 3542.
- Oscillation**, visual perception, tracking, *Musca domestica* 912.
- Oscinella**, pests, abundance, seasonal variations, Sorghum, Nigeria 4560.
- Oscinella frit**, oviposition, host plants, host selection, distribution, eggs 7486.
- Oscinella frit**, survival, turf, mowing 6132.
- Osmia coarctata**, habitat preferences, nesting, urban environment, walls, British Isles 1182.
- Osmia lignaria**, population structure, sex ratio, annual variations, USA, Utah 6871.
- Osmia lignaria propinqua**, orchards pollination, agricultural practices 6933.
- Osmia lignaria propinqua**, pollination, dispersal, orchards 5342.
- Osmia lignaria propinqua**, pollination, orchards, agricultural practices 5343.
- Osmia lignaria propinqua**, pollination, orchards, nest building, agricultural practices 6935.
- Osmia lignaria propinqua**, pollinators, introduced species, dispersal, population establishment, orchards 9295.
- Osmia lignaria propinqua**, pollinators, population establishment, USA, California 9286.
- Osmia marginata**, nest building, *Osmia marginata* parasites association 1965.
- Osmia maritima**, habitat, nesting behavior, feeding, life cycle 6851.
- Osmia rufa**, habitat preferences, nesting, urban environment, walls, British Isles 1182.
- Osmia scutellata**, first records, nests, morphology, mouthparts, USA, Utah 5880.
- Osmia scutellata**, new records, nests, pollen, food sources, functional morphology, mouthparts, USA, Utah 9101.
- Osmoregulation**, antibiotics, nikkomycin, effects on malpighian tubules, *Epilachna varivestis* 5713.
- Osmoregulation**, antibiotics, nikkomycin, ultrastructure, gut, malpighian tubules, *Epilachna varivestis* 4175.
- Osmoregulation**, blood meals osmotic pressure effects on, *Ornithodoros moubata* 231.
- Osmoregulation**, cuticle permeability, salinity effects, *Cnemidophorus bifasciatus* hungerford 978.
- Osmoregulation**, dehydration survival, water balance, *Tenebrio* 236.
- Osmoregulation**, digestive tract, *Diplopoda* 161.
- Osmoregulation**, excretion, water balance, *Periplaneta americana* 5011.
- Osmoregulation**, gastrointestinal tract, gastric caecum, *Aedes togo* 5706.
- Osmoregulation**, salivary gland, secretion, physiology, *Rhipicephalus appendiculatus* 257.
- Osmoregulation**, water balance, drought tolerance, *Oryzias* unguicularis 8104.
- Osmotic pressure**, blood meals, effects on osmoregulation, *Ornithodoros moubata* 231.
- Osmiopsis**, synonymy, taxonomic revision, Australia 3227.
- Ostrinia**, mating behavior, reproductive isolation, sympatric populations 6659.
- Ostrinia**, reproductive isolation, hybridization, sympatric populations 7050.
- Ostrinia furnacalis**, identification, species composition, sex pheromone, China, People's Rep., Henan Province 3750.
- Ostrinia furnacalis**, sex pheromone, chemical composition 1781.
- Ostrinia furnacalis**, sex pheromone, chemical composition, pheromone traps 1778.
- Ostrinia naryensis**, reproductive isolation, hybridization, sympatric populations, *Ostrinia nubilalis* 7050.
- Ostrinia nubilalis**, temperature effects on flight activity, predictions, USA, Ohio 5124.
- Ostrinia nubilalis**, agricultural diets, DIMBOA, effects on growth 6100.
- Ostrinia nubilalis**, artificial diets, DIMBOA, effects on development, mortality, reproduction 9306.
- Ostrinia nubilalis**, bioassays, spores, spore crystals, toxicity, *Bacillus thuringiensis* 5052.
- Ostrinia nubilalis**, bioassays, toxicity, spores, crystals, *Bacillus thuringiensis* 5780.
- Ostrinia nubilalis**, biological control, microsporidiosis persistence, *Nosema pyrausta*, *Vairimorpha necatrix* 8495.
- Ostrinia nubilalis**, biological control, parasitism, association, infection, *Nosema pyrausta*, *Macrocentrus grandis* 6039.
- Ostrinia nubilalis**, biological control, pathogens, nuclear polyhedrosis virus, efficacy 8443.
- Ostrinia nubilalis**, culture effects on larvae survival, development 3485.
- Ostrinia nubilalis**, development, molting, morphogenesis, monitoring methodology 8211.
- Ostrinia nubilalis**, diapause, juvenile hormones, enzymatic activity 5075.
- Ostrinia nubilalis**, feeding deterrents, exotoxins, *Bacillus thuringiensis* 5779.
- Ostrinia nubilalis**, flight activity, temperature effects 1943.
- Ostrinia nubilalis**, flight, emergence, patterns, temperature effects, spring 2102.
- Ostrinia nubilalis**, host plants damage, pest resistance, genetic factors *Zea mays* 3780.
- Ostrinia nubilalis**, hybridization, survival, *Ostrinia nubilalis*, *Ostrinia penialis* 7053.
- Ostrinia nubilalis**, identification, species composition, sex pheromone, China, People's Rep., Henan Province 3750.

Ostrinia nubilalis, (continued)

- infestation, damage, crop fields, *Lycopersicon esculentum* 6193
infestation effects on disease resistance, *Zea mays* 8496
insecticides, toxicity 6626
insecticides, toxicity, synergism 3440
instars, host-parasite interactions, embryogenesis, parasitoids, *Macrocentrus grandis* 3489
interspecific relationship, *Aspergillus flavus*, *Penicillium oxalicum*, *Fusarium* 6696
interspecific relationships, infection, *Zea mays*, *Aspergillus flavus* 9272
larvae mortality, pathogenicity, *Vainmophora necatrix* 8168
oviposition, circadian rhythms, photoperiod 9045
parasites, occurrence, *Lydeella thompsoni*, USA, Delaware 2033
parasites, population status, *Enhorbus terebrans*, *Macrocentrus grandis*, *Aploma caesar*, *Lixophaga*, USA, Connecticut 8499
parasitoids, introduced species, population decline, *Enhorbus terebrans*, *Lydeella thompsoni*, *Macrocentrus grandis*, USA, Iowa 6408
pest control, pesticide applications, methodology, crop fields 9341
pest resistance, host plants, developmental stages, *Zea mays* 6914
pest resistance, host plants, genotypes, growth, *Spodoptera endemia*, *Zea mays* 8518
pest resistance, indicators, 6-methoxybenzoxazolinone, *Zea mays* 6099
pest resistance methodology, bioaccumulation, 6-methoxybenzoxazolinone, *Zea mays* 8851
pests, biological control, crop rotation, Switzerland 6917
pests, biological control, mycotoxins, aflatoxins, *Aspergillus flavus*, *Zea mays* 4625
pests, feeding damage, *Phaseolus vulgaris* 8571
pests, predation, effects on population levels, *Agelaus phoeniceus*, Canada, Quebec, Beauharnois 5262
pheromone traps, efficacy 596
pheromones, olfactory perception, electroantennograms 1739
population levels, pathogens, infection, parasites, *Nosema pyrausta*, *Macrocentrus grandis* 5356
reproductive isolation, hybridization, sympatric populations, *Ostrinia naryensis* 7050
sex, exotoxins, *Bacillus thuringiensis* 5051
trapping, age, indicators, damage, *Capsicum annuum* 8514
- Ostrinia oumburatalis**,
hybridization, survival, *Ostrinia nubilalis*, *Ostrinia pentalis* 7053
- Ostrinia pentalis**,
hybridization, survival, *Ostrinia nubilalis*, *Ostrinia oumburatalis* 7053.
- Oswaldi**,
traps, catches, oviposition 55.
- Othresis fulvionica**,
pests, new records, infestation, Citrus, India, Punjab 7790.
- Othresis materna**,
pests, new records, infestation, Citrus, India, Punjab 7790.
- Othresis sulcatilis**,
host plants, effects on fecundity 5340
larvae, development, crowding effects on, mortality 431.
pests, biological control, parasitism, *Heterorhabditis heliothidis* 2188
- Ottis media**,
Staphylococcus epidermidis, *Psoroptes cuniculi*, association, rabbits 5285.
occurrence, geographical distribution, India, Tamil Nadu 9216
- Otodectes**,
parasites, detection methodology 2483
- Otodectes cyathis**,
parasites, feral populations, *Felis* 511.
- Oxentomus**,
taxonomy, morphology, museum collections 4068
- Oxema melanopus**,
developmental stages, mortality, environmental effects, ecological distribution 1112.
egg laying effects on trichomes, *Trinacrum aestivum* 9328
pests, bibliographies, North America 7928.
- Oxithreacka**,
population density, species diversity, vegetation patterns, rangelands, *Acrididae*, USA, Arizona 6050
- Ova**,
hatching, diagnosis, medical importance, *Sarcoptes scabiei* 3668
- Ovaries**,
diets, proteins, *Dysdercus koenigii* 7480.
ecdysteroids, endocrine system, development, *Bombyx mori* 4162
oocytes, development, morphology, cytology, *Rhodnius prolixus* 326
- Ovarioles**,
morphology, *Passalus convexus* 7426.
- Ovary**,
anatomy, histology, developmental stages, aging methods, *pediculus humanus* 4242
apical, histology, *Lipitoraxa decemlineata* 7427
bioaccumulation, molting hormones, steroids, *Bombyx mori* 210
biosynthesis, ecdysteroids, growth regulators, azadirachtin, effects on, *Locusta migratoria* 377.
cell culture, infection, *Bombyx mori* 874.
cells differentiation, electropotential, *Cecropia*, *Rhodnius* 3512.
cholesterol, incorporation, ecdysteroids, oogenesis, *Schistocerca americana* 211
cytology, degeneration, *lepa*, *Dysdercus cingulatus* 2694
development, age determination methodology, *Culicidae* 8849.
development, autogeny, *Chrysops*, USA, New England 1131
development, blood meals effects on, *Stomoxys calcitrans* 3497
development, dispersal, flight activity, *Hippodamia convergens* 5211.
development, dispersal flight, *Hippodamia convergens* 9171
development, effects on brain neurosecretion, *Acheta domestica* 984
development, histology, larvae, polyphagous, *Bombyx mori* 1087
development, juvenile hormones, brain hormones, *Aedes aegypti* 3488.
development, oviposition, races, *Apis mellifera* 4279
development, precocene II effects on, *Oxya japonica* 1115
development, reproductive state, foundress, *Polistes gallicus* 5060
development, sensitivity, growth regulators, precocene II, *Phrynosoma opertus* 8225.
development, thiotepa effects on, *Sarcophaga ruficornis* 356.
development, workers, *Formica sanguinea* 3505.
disposition, methotrexate, toxicity, *Brachion hebrae* 8198.
dormancy, overwintering, *Danaus plexippus* 3610.
effects on juvenile hormones regulation, *Aedes aegypti* 2583.

Ovary, (continued)

- follicles, protein biosynthesis, vitellogenin, *Drosophila melanogaster* 3506.
growth, inhibition, ethionine, *Agna housei* 3319.
maturation, corpora allata activity, *Dysdercus cingulatus* 9060.
maturation, corpora allata, biosynthesis, juvenile hormones, *Locusta migratoria* 2714
mitochondria, enzymatic activity, kynurenine 3-monoxygenase, *Ephesia kuehniella* 3317
mitochondria inhibition, dipterodens, *Raddosia*, *Macrotermes subhyalinus* 2556.
morphology, oogenesis, *Musca domestica* 2708.
parasites, reproduction, *Babesia ovis*, *Rhipicephalus bursa* 4184
parous state, aging methods, *Culex nigripalpus* 855.
sex hormones source, *Rhodnius prolixus* 964
sexual maturity, biosynthesis, juvenile hormones, *Locusta migratoria* 4278.
sterility, mutants, characterization, RNA biosynthesis, *Drosophila melanogaster* 1530.
ultrastructure, cytoplasm transport, *Coccinella*, *Tenebrio* 1077.
viruses isolation, DNA characterization, *Campoplex sonorensis* 8122.
vitellogenesis, feedback inhibition, *Aedes aegypti*, *Aedes atropalpus* 327.
- Ovatus malisuctus**,
settling behavior, locomotor activity, host plants 1243.
- Overwintering**,
acclimation, temperature effects, hydration, water content, cryogenics, larvae, *Eurosta solidaginis* 238
aggregation behavior, clumping, gynes, *Polistes exclamans* 9355.
aggregation, energetics, *Danaus plexippus*, USA, California 6844.
aggregation, *Polistes exclamans* 5228.
anthophila fabriciana, British Isles, England 5153.
apiculture methodology, *Apis mellifera* 5384.
benches, sedimentation, ice, *Tricoptera*, *Chironomidae*, Sweden, Vindalven R. 3648.
cold tolerance, larvae, pupae, *Cirphis unipuncta*, *Plusia gamma* 6864.
cold tolerance, metabolism, larvae, *Eurosta solidaginis* 4254.
cold tolerance, strains, *Myzus persicae* 5893.
cold tolerance, survival, fecundity, genetic drift, *Drosophila melanogaster* 3926.
colonies, morphology, castes, *Vespaula squamosa* 4644.
development, life history, *Oreophila occidentalis*, USA, Oregon 8282.
diapause, feeding, blood meals, *Culex tarsalis* 3570.
diapause, *Papilionoidea*, *Hesperioidea*, North America 6880.
diapause, *Pala rosae*, British Isles 2674.
Drosophila melanogaster, effects on infection, sigma virus 4203.
egg production, survival, *Rhopalosiphum padi*, Finland 5225.
eggs development, environmental effects, soil temperature, *Diabrotica virgifera virgifera* 1863.
eggs, diapause termination, temperature effects on, *Panonychus ulmi* 8214.
eggs, *Euxoa sibirica*, Japan, Tohoku 7438.
eggs, mortality, abundance, *Rhopalosiphum padi* 2682.
emergence, flight activity, *Thanasimus dubius* 9084.
emergence, mortality, crop fields, *Cylindrocorticulus adspersus* 5896.
emergence, parasites effects on, *Microctonus vittae*, *Phyllotreta cruciferae*, *Phyllotreta striolata* 8316.
hives, equipment, apiculture, *Apis mellifera* 6176.
hyperparasitism, *Lymnec orbus*, *Launog retentor*, *Megalopyge opercularis* 3579.
larvae, infection, parasites, pathogens, *Sayresia pomonella* 9004.
larvae, silage, *Stomoxys calcitrans* 2199.
larvae, soil distribution, pests, *Smicronyx fulvus*, *Helianthus annuus* 6932.
larvae, Taxodium pests, *Dioryctria pygmaea*, USA, Florida 3560.
leaf litter, riparian environments, ponds, population density, *Gerris odontogaster* 6003.
life cycle, host plants, *Prosopis*, *Tetralopha euphemella*, USA, Texas 5961.
mating, spermatoozoa storage, *Scaptieris aculeus*, USA, Florida 5148.
metabolism, endocrine activity, *Eurosta solidaginis* 4255.
mortality, crop fields, *Coleomegilla maculata lengi*, Canada, Ontario 6021.
nesting behavior, *Liris argentata* 3623.
ovary, dormancy, *Danaus plexippus* 3610.
parasitoids, pest control, *Lymantria dispar*, *Brachymeria lasus*, *Coccynomimus disparis*, USA, Connecticut 8466.
Phyllotreta cruciferae, *Phyllotreta punctulata*, *Phyllotreta striolata*, site selection, habitat, population density 1974
population studies, emergence, temperature effects, *Heliothis virescens*, USA, Arizona 1862
populations, integrated control, *Pectinophora gossypiella* 3021.
soil fauna, ecological distribution, population density, *Thysanoptera*, USA, Illinois 9367.
survival, *Agrotis ipsilon*, USA, Missouri 9202
survival, host plants, *Lygus* 6012
Telenomus californicus, parasites, eggs, *Orygia pseudosugata* 2014.
temperature tolerance, *Cyclocephala* 1971
- Overwintering behavior**,
Hemiptera, USA, South Carolina 455.
- Ovicide**,
cyclopylate, bioassays, *Panonychus ulmi*, *Panonychus citri*, *Tetranychus urticae*, *Tetranychus kanzawai*, *Tetranychus desertorum* 7398.
plant extracts, coumarn, eupoin, *Eupatorium japonicum*, *Drosophila melanogaster* 6621
xanthene, effects on, *Musca domestica* 1041.
- Oviparity**,
fossils, phylogeny, *Aphidina*, Tertiary 792.
- Oviposition**,
artificial substrates, mass rearing, *Pimpla instigator* 2735
artificial substrates, rearing, *Gonia cinerascens* 6472
Ataenius streptus, life history, phenology, flowering, soil temperature 1867.
attractancy, amino acids, *Culex pipiens molestus*, *Aedes aegypti* 8966
attractancy, dipropyl disulfide, EAG responses, chemoreception, *Hylemya antiqua* 3358.
attractants, efficacy, assays, *Aedes triseriatus* 1897.
biological control, sex pheromone, air permeation technique, *Spodoptera frugiperda*, *Heliothis zea* 9346
biometrics, *Holotrichia consanguinea* 7520
biometrics, host plants, *Wyeomyia vanduzeei* 2075
Boophilus microplus, parasites, *Babesia bovis* 2038
cages, mass rearing, *Diatraea grandiosella* 3240
cages, size effects on egg production, *Anthonomus grandis grandis* 8238
Callosobruchus maculatus, markers, host selection, legumes 1899
capture-recapture studies, autogeny, blood meals, feeding, *Culex tarsalis* 6745
chemical stimuli, odors, *Lucilia cuprina* 1917
circadian rhythms, photoperiod, *Ostrinia nubilalis* 9045.

Oviposition, (continued)

- comparative studies, diets, effects on, *Mecynotus sexmaculata* 1117.
 comparison, *Trichogramma brevicapillum*, *Trichogramma pretiosum* 7424.
 conspecific eggs effects on, *Euphydryas* 6675.
 deterrents, excretory products, *Trichoplusia* 14269.
 deterrents, intraspecific relationships, *Rhagoletis basiola* 1920.
 deterrents, parasites, host plants, *Hylemya* 528.
 deterrents, pheromones, host plants, competition, *Hylemya* 586.
 deterrents, pheromones, persistence, *Pieris brassicae* 217.
 deterrents, pheromones, *Rhagoletis zephyria* 8971.
 deterrents, plant extracts, *Lemna minor*, *Aedes aegypti* 5311.
 deterrents, plant extracts, *Thuja plicata*, *Hylemya antiqua* 4352.
 development, diets effects on, *Hemiothrips femoralis* 6645.
 development, host plants, *Balanagostis kola*, *Cola acuminata*, *Cola verticillata* 8352.
 development, instars, *Macrotermes michaelsoni* 435.
 development, life history, *Euphorbia* 4323.
 development, *Phytoseiulus persimilis*, *Amblyseius degenerans* 1870.
 diel variations, *Atherigona soccata* 4983.
 diets, food organisms effects on, *Cardiastethus nazarensis* 6651.
 dispersal, nuclear polyhedrosis virus marking, females, *Hyphantria cunea* 2858.
 diurnal variations, aggregation, environmental factors, *Zonocerus variegatus* 352.
 diurnal variations, *Culicidae* 3525.
 edge effect, host searching behavior, *Anthochoris cardamines* 4290.
 egg production, age, mating effects on, *Heliothis virescens* 8213.
 egg production, blood meals, *Rhipicephalus sanguineus* 8256.
 egg production, *Hybomitra bimaculata*, Switzerland 6718.
 egg production, mating stimuli, *Glycidodes sigillatus* 9049.
 egg production, population levels, *Corypholus fungi*, *Lycoriella mali* 4479.
 egg production, substrate preferences, *Tetraneura pollen* 6673.
 egg-throwing, trees, *Mecistogaster jocosae*, Bolivia 6677.
 eggs, abundance, crop fields, *Orus insidiosus*, *Nabis* 5322.
 eggs, diapause, survival, *Culicidae* 1373.
 eggs distribution, *Sorghum bicolor* host plants, *Atherigona soccata* 4288.
 eggs, hatching, *Aedes albopictus* 5855.
 eggs, males, paternal behavior, brood care, *Belostomatia micantulum*, Paraguay 1147.
 eggs traps, methodology, *Phthorimaea operculella* 857.
 Enallagma cbrum, *Enallagma vernale* 7025.
 environmental conditions, pests, *Dicranotus punctiferalis* 6924.
 environmental effects, eggs hatchability, *Glycidodes sigillatus* 9049.
 environmental effects, substrate specificity, *Rhagoletis pomonella* 2684.
 experience, discrimination, hosts, *Pieris rapae crucivora*, *Apatenae glomerans* 7497.
 factors affecting, *Acheta domestica* 8255.
 factors affecting horizontal distribution, *Aedes triseriatus* 4482.
 fecundity, habitat, *Toxorhynchites amoenus*, USA, Indiana 5857.
 fecundity, host plants, *Atherigona soccata* 5842.
 fecundity, mating behavior, *Hylotrupus bajulus* 3527.
 females, photoperiods, males, effects on, *Trichoplusia* 11881.
 flight activity, salt marshes, *Hybomitra daeckii*, USA, New Jersey Coast 6710.
 foliage age, *Arachis hypogaea*, effects on, *Sopodotera frugiperda* 382.
 food plants, larvae survival, *Anthochoris cardamines*, *Alliaria petiolata* 5954.
 food preferences, *Thanaosimus dubius* 6014.
 food quality, nutrient utilization, *Dicranotus punctiferalis*, *Elymana sulphurella*, *Eucelid incinus*, *Yginioida scutellaria* 3547.
 functional morphology, instars, *Eyprepocnemus alacris* 461.
 gonotrophic cycles, *Aedes malayensis*, *Aedes polynesiensis* 1854.
 habitat preferences, effects on larvae survival, *Drosophila nigroparaculata*.
Drosophila mettleri 406.
 habitat preferences, host plants, *Euphydryas libye* 6660.
 habitat preferences, host plants, *Margia testulalis*, *Margia unguiculata* 8349.
 habitat preferences, reproductive behavior, *Margia testulalis* 433.
 habitat preferences, soil moisture, *Chortogon trachypus* 5103.
 habitat, tree holes, larvae, *Hadrothemus scaberrimus* 3524.
 horizontal distribution, *Elasmopalpus lignosellus* 1139.
 hormones, 20-hydroxyecdysone, *Aedes aegypti* 5875.
 host plants, *Agave*, *Ficus glabrata* 2051.
 host plants, air pollution effects on, *Epilachna varivestis* 2153.
 host plants, *Apogonia grossa*, Brazil 6668.
 host plants association, selection, *Callosobruchus maculatus* 1248.
 host plants, *atractantia*, *Papilio* 3594.
 host plants cardenolide effects on, *Asclepias humistrata*, *Danaus plexippus*, USA, Florida 9154.
 host plants effects on, *Frumentum undinella*, *Solanum carolinense* 2839.
 host plants, *Heliothis zea*, *Arachis hypogaea* 6106.
 host plants, host searching behavior, host preferences, *Colias philodice eriphyle* 6682.
 host plants, host selection, distribution, eggs, *Oscinella frit* 7486.
 host plants, introduced species, *Cruciferae*, *Pteridae* 2048.
 host plants, larvae survival, *Papilio glaucus canadensis* 3595.
 host plants, *Loxostege commixtalis* 1994.
 host plants, *Lygus*, *Nabis*, *Spiridulatus festinus* 8384.
 host plants, mistakes, toxicants, larvae development, *Papilio glaucus*, *Angelica atropurpurea* 8247.
 host plants, *Pectinophora gossypiella*, *Gossypium* 6157.
 host plants pest resistance, *Solanum berthaultii*, *Solanum tuberosum*, *Leptinotarsa decemlineata* 8548.
 host plants population density effects on, *Atherigona soccata*, *Sorghum* 6104.
 host plants, substrate preferences, *Aphidletes aphidimyza* 6679.
 host plants, substrate preferences, *Claudia cajan*, *Melanagromyza obtusa* 6674.
 host preferences, host plants, *Apatenae flavipes* 2579.
 host preferences, host plants, *Brassica*, Sweden 4401.
 host preferences, host plants, *Euphydryas editha* 5955.
 host searching behavior, parasites, *Aphytis*, *Aspidiotus neri* 7542.
 host searching behavior, parasites, *Paracynophonus africanus* 9132.
 host searching behavior, parasites, *Poecilostictus cothurnatus*, *Bupalus piniarius* 2020.
 host searching behavior, parasites, *Amius hesperidum*, *Encarsia opulenta*, *Aleuracanthus woglumi* 2830.
 host searching behavior, parasitoids, *Ascogaster reticulatus* 7482.
 host selection, fecundity, parasitoids, *Euplectrus kuwanae* 2742.
 host-parasite interactions, host preferences, parasitoids, *Poecilostictus cothurnatus*, *Bupalus piniarius*, Netherlands 5179.
 hyperparasitism, *Micromyces flavus*, *Mareta juvenis* 5184.
 hyperparasitism, *Micromyces flavus*, *Pachyneuron concolor* 5177.

Oviposition, (continued)

- inhibition, parasitoids, symbiosis, *Sclerotium asteris*, *Asteromyia carbonifera*, *Torymus capreolae* 4309.
 insemination effects on, *Apis mellifera* 8259.
 life cycle, *Chortoneura occidentalis*, USA, Washington 7519.
 life cycle, development, survival, *Argas persicus* 1181.
 life cycle, development, temperature effects, *Acromyza intermedia* 2686.
 life cycle, host plants, *Hypoxylus nubilosus*, *Amaranthus caudatus*, Egypt 6730.
 life cycle, host plants, *Prosopis*, *Tetralopha euphemialis*, USA, Texas 5961.
 life cycle, population dynamics, *Majuscada septendecim* 8401.
 life cycle, streams, *Philopotamus montanus*, British Isles, Lake District 2794.
 life history, *Amblyseius citrifolius* 6719.
 life history, biometrics, parasitoids, *Euplectrus kuwanae*, *Argyrogramma albostriata* 1223.
 life history, *Empoasca dolichi*, Nigeria 2772.
 life history, flight activity, *Euprepocnemus alacris*, USA, California 7511.
 life cycle, host plants, *Barris archiborata*, *Portulaca oleracea* 6809.
 life history, host plants, *Hypurus bertrandi*, *Portulaca oleracea* 6728.
 life history, predation, fecundity, *Toxorhynchites splendens* 1188.
 life history, vectors, *Aedes africanus* 3687.
 longevity, reproduction, development, *Blissus leucopterus*, effects on, host plants, grasses, damage, photoperiods 536.
Lygus hesperus, genotypes, host plants 1903.
 males eggs, host preferences, *Coccophagus cowpen* 2732.
 mass rearing, cages, effects on egg production, *Anthonomus grandis grandis* 4086.
 mass rearing methodology, *Lygus hesperus* 8023.
 mating behavior, accessory gland secretions effects on, *Drosophila melanogaster* 5858.
 mating behavior, activity patterns, *Doryctes amarella* 1914.
 mating behavior, *Antheraea yamanai*, Japan 1910.
 mating behavior, *Apis mellifera* 4293.
 mating behavior, *Baetis lineolata*, Japan, Tokyo 5144.
 mating behavior, life history, oviposition, *Langue retentor* 1187.
 mating behavior, territorial behavior, *Platyphya caligata* 8614.
 mating, diurnal variations, *Rhagoletis mendax* 3639.
Neoneura waltheri, Argentina 3260.
 nest building, galleries, *Dendroctonus frontalis* 1891.
 nesting behavior, habitat, *Lyroda subita* 5845.
 neuroendocrine system, temperature effects, *Dysdercus koenigii* 4260.
 neurophysiology, motor activity, *Acheta domestica* 4266.
Oltanaria belli, Jamaica 5892.
 orientation, host plants susceptibility, pests, *Chilo partellus* 7680.
 ovary development, races, *Apis mellifera* 4279.
 overwintering, hyperparasitism, *Lymecor orbus*, *Langue retentor*, *Megalopyge opercularis* 3579.
 parasites, artificial substrates, *Gonia cinerascens* 2823.
 parasites, biological control, *Dendrosotus protuberans*, *Scolytus multistriatus* 5817.
 parasites, colonies, *Phytomyza vestalis*, *Bombus terrestris* 4376.
 parasites, host specificity, *Dryinidae* 401.
 parasites, host kairomones effects on, *Nemeritis canescens*, *Ephestia kuehniella* 4384.
 parasites, host population density effects on, *Aphelinus semiflavus*, *Acyrtosiphon* 8318.
 parasites, kairomones effects on, *Tetrastichus schoenobii*, *Tytopryza incertulus* 1218.
 parasites, mass rearing, *Pales pavidus*, *Galleria mellonella* 5104.
 parasites, population density, host selection, competition, *Biostes longicauda* 2028.
 parasitism, *Epitriptus unalaris*, *Clubiona cambridgei*, *Salticus* 6756.
 parasitism, host specificity, *Brochymena*, *Trichopoda plumipes*, USA, Texas 2024.
 parasitoids, host searching behavior, kairomones, eggs, *Adoxophyes*, *Ascogaster reticulatus* 7485.
 parasitoids, host kairomones effects on, *Cardiophiles nigripes*, *Heliothis virescens* 5176.
 parasitoids, life cycle, *Dibrachys boarimae*, *Galleria mellonella* 9131.
 parental behavior, social hierarchy, dominance, *Parischonogaster nigricans serrei* 5111.
 pathogens effects on, sheep, *Lucilia cuprina* 1333.
 pest attack, *Dendroctonus frontalis* 6680.
 pest control parasites, environment conditions, *Brachymeria hebetor*, *Ephestia cautella* 2025.
 pesticides effects on, *Lyctus brunneus* 1060.
Platylabusus bilineatus, hosts, stress, *Metrosideros collina polymorpha*, USA, Hawaii 1961.
 plant extracts, chemical stimuli, *Zea mays*, *Sitotroga cerealella* 4270.
 population density, temperature effects, female body size, emergence, effects on, *Dendroctonus frontalis* 1879.
 population dynamics, development, pest resistance, *Solanum berthaultii*, *Leptinotarsa decemlineata* 4407.
 predation evolution, *Ammophila aberti* 2021.
 predation, population dynamics, *Aphelinus thomsoni*, *Drepanosiphum platanoideis* 2887.
 predators, pesticides, effects on nontarget organisms, *Amblyseius fallacis* 5131.
 rearing, mortality, *Argasidae* 8847.
 repellents, fatty acids, *Culicidae* 5859.
 reproductive behavior, biometrics, *Stator pygidialis* 5102.
 reproductive behavior, environmental effects, *Liparus lawrensis tropicalis* 4258.
 reproductive behavior, host plants, *Chilo partellus*, *Zea mays* 7492.
 reproductive behavior, host plants, *Hesperia ottoe*, *Echinacea pallida* 8246.
 reproductive behavior, life cycle, *Simulium fulviventris* 4330.
 reproductive behavior, population dynamics, parasites, *Euplectrus platypeneae* 1149.
 reproductive behavior, sex linkage, inheritance, *Callosobruchus maculatus* 5483.
 resource availability, population density, males, breeding success, *Scatophaga stercoraria* 6857.
 resource partitioning, pheromones, deterrents, intraspecific relationships, *Dacus cucurbitae* 5850.
 rhythms, acetic acid effects on, *Drosophila melanogaster* 2749.
 rhythms, external stimuli, photoperiods, *Drosophila melanogaster* 4262.
Sciopterus obscurus, USA, Oregon 448.
 sensilla, antennal sensilla, legs, ovipositor, *Tinea pellionella* 3286.
 sensilla, morphology, *Atherigona soccata* 4131.
 sexual behavior, diel variations, photoperiods, circadian rhythms, *Culex quinquefasciatus* 1153.
 sexual behavior, *Phthia picta*, Brazil, Sao Paulo 5105.

Oviposition, (continued)

- sexual receptivity, mating, feeding, *Amblyomma americanum* 9068
 sexual reproduction, egg production, fecundity, sex ratio, *Lagna villosa* 6630
 sexual reproduction, life cycle, generations, *Chironomus yoshimatsui*, Japan, Zempukuji R 3556
 sexual reproduction, *Netoptychus albida*, USA, Indiana 3862
 site location, sympatric populations, *Aedes*, Kenya 2868
 site preferences, host plants, *Heliothis zea*, *Lycopersicon esculentum* 6166
 site preferences, larvae survival, *Chonstonea fumiferana* 5849
 site preferences, pests, *Diabrotica virgifera*, *Diabrotica longicornis*, *Zea mays* 6966
 site selection, *Drosophila melanogaster* 405
 site selection, food availability, yeasts, niche pattern, *Drosophila melanogaster* 3530
 site selection, host plants, *Insecta*, *Lycopersicon esculentum* 2081
 site selection, host plants, *Ornus insidiosus*, *Nabis roseipennis*, *Nabis americoferus* 9069
 site selection, host plants, *Ornus tristicolor* 1894
 spatial distribution, temporal variations, eggs, *Gossypium*, *Heliothis armiger* 1154
 stimulants, host plants, efficacy, *Hylemya antiqua* 515
 stimulants, larvae, *Aedes togoi* 399
 stimulants, *Lycopersicon esculentum*, host plants, *Keiferia lycopersicella* 4402
 stimulation, microorganisms effects on, *Hylemya antiqua* 1136
 stimuli, host plants seedlings microorganisms effects on, *Hylemya antiqua* 5860
 substrate preferences, *Aedes aegypti*, Thailand 5846
 substrate preferences, *Cucumis sativus*, *Diaphana nitidula*, *Diaphana hyalina* 5112
 substrate preferences, host plants, *Callosobruchus chinensis*, *Callosobruchus maculatus* 7495
 substrate preferences, host plants, *Sorghum vulgare*, *Atherigona soccata* 7483
 substrate preferences, soil types, soil moisture, *Chrotogonus tra* 2734
 substrate preferences, visual stimuli, light, *Aedes vexans* 5077
 substrate preferences, yeasts, *Drosophila* 9072
 substrate specificity, environmental effects, host plants, *Siricidae*, Australia 1896
 suppression, pest control, sex pheromone, air permeation technique, *Spodoptera frugiperda*, *Heliothis zea* 4624
 suppression pheromones, chemoreceptors, morphology, *Rhagoletis pomonella* 4136
 survival, larvae, *Danaus plexippus* 5958
 survival, temperature effects on, *Patasson laameerei* 5082
 Telenomus californicus, parasites, eggs, *Orygia pseudotsugata* 2014
 Telenomus californicus, parasites, hosts, *Orygia pseudotsugata* 2015
 temperature effects, *Anurcaria genumatalis* 1934
 temperature effects, *Aphytis lingnanensis*, *Aphytis melinus* 2166
 temperature effects, *Listronotus oregonensis* 3492
 temperature effects on, *Oligonychus subdus*, *Oligonychus milleri* 8283
 temperature effects on, *Patasson laameerei* 9055
 temperature effects, *Peridroma saucia* 2685
 timing, seasonal variations, parasites, *Boophilus annulatus*, *Boophilus microplus*, cattle 1916
 traps, attractants, *Amyelois transstella* 6170
 traps, catches, *Paratetigena silvestris*, *Tachinomyia*, *Oswaldi*, *Patelloa silvestra*, *Gonia sagas* 55
 traps, eggs enumeration, substrate specificity, methodology, *Aedes triseriatus* 860
 vegetation patterns, plants, effects on, site location, *Heteronychus arator* 403
 vitellogenesis, juvenile hormones effects on, *Kaloterms flavicollis* 4280
 water temperature, culex pupae 5081
 webs spinning, hyperparasitism, *Signiphora coquillettii* 7543

Ovipositor,

- chemoreceptors, sensilla, *Ethorimeae operculata* 6530
 morphology, *Anastrepha striata*, *Anastrepha zernyi* 8886
 oviposition sensilla, *Tinea pellionella* 3286

Oris,

- infestation, treatment, skin diseases, *Sarcoptes scabiei*, Sudan 2924
 mortality, parasites infestation, *Ctenocephalides canis* 7631

Oris canadensis,

- ectoparasites, transmission, domestic animals, *Psoroptes oris* 651.

Ovoiviviparity,

- embryogenesis, molting, juvenile hormones, morphology, *Nauphoeta cinerea* 3514.
 sexual reproduction, *Symptloce bimaculata* 5835

Oviposition,

- eggs cortex receptors development, *Drosophila* 1079.
 induction, mating effects on, neuroendocrine system, *Glossina morsitans* 388.
 mating age, effects on, *Glossina pallidipes* 7423.

Oxaea,

- pollination, flowering phenology, *Solanum palnancanthum* 4411

Oxalis,

- host plants, feeding, larvae, *Galga parita* 7560

Oxamyli,

- insecticides, toxicity, *Phyllonorycter blancardella*, *Apanteles ornigis* 8200

Oxidases,

- activity, microsomes, seasonal variations, *Scaptiscus aetetus*, *Scaptiscus vicinus* 5694

Oxidation,

- n-ethyl-N-methylcarbamate effects on, phenylalanine, tyrosine, *Bombyx mori* 7317.

(E)-9-Oxo-dec-2-enoic acid,

- mandibular glands secretions, *Apis mellifera* 242.

(E)-9-Oxo-2-decenolic acid,

- attractants, pheromones, *Apis mellifera* 8533

9-Oxodec-2-enoic acid,

- queen pheromones, effects on workers pheromones, *Apis mellifera* 4647

Oxya japonica,

- diflubenzuron, toxicity, effects on reproduction 5767

- ovary development, oogenesis, procoecine II effects on 1115

Oxybelus sericeus,

- nesting behavior, territorial behavior, biology, males 1968.

Oxycaeninae,

- morphology, genitalia 9039

Oxycaerus hyalinipennis,

- food utilization, enzyme activity 7320.

- food utilization, metabolism, carbohydrates 7309.

- fructose metabolism 7322.

Oxyethira albiceps,

- life history, New Zealand, Waitakere R., Olinga feredayi, life history. New

Oxyethira albiceps, (continued)

- Zealand, Waitakere R. 451.

Oxyethira albid,

- synonymy, *Oxyethira dualis* 5651.

Oxyethira arizona,

- synonymy, *Oxyethira cirrifer* 5651.

Oxyethira barnstoni,

- synonymy, *Oxyethira mirabilis* 5651

Oxyethira cirrifer,

- synonymy, *Oxyethira arizona* 5651

Oxyethira dualis,

- synonymy, *Oxyethira allosi* 5651.

Oxyethira dunbartonensis,

- new species, taxonomy, morphology, geographical distribution, USA 850.

Oxyethira leonensis,

- new species, taxonomy, morphology, geographical distribution, USA 850.

Oxyethira mirabilis,

- synonymy, *Oxyethira barnstoni* 5651.

Oxyethira sinisagae,

- new species, taxonomy, morphology, geographical distribution, USA 850.

Oxyen,

- effects on development, larvae, *Drosophila melanogaster* 7453.

- effects on pests vertical distribution, stored products, *Oryzaephilus surinamensis*, *Stiphophilus oryzae*, *Rhyzopertha dominica* 1445.

- radiation, effects on embryos development, *Drosophila melanogaster* 1120.

Oxygen consumption,

- cold acclimation, *Cryptolestes ferrugineus*, *Oryzaephilus surinamensis*, *Rhyzopertha dominica*, *Tribolium castaneum* 3369.

- diel periodicity, colonies, *Apis mellifera* 5417.

- flight activity, energetics, *Malacosoma americanum* 891.

- metabolism, energetics, colonies, *Apis mellifera* 4641.

- metabolism, juvenoids effects on, *Heliothis armigera* 7329.

- metabolism, life span, *Musca domestica* 4237.

- respiration, cold tolerance, acclimation, *Belgica antarctica* 8107.

- temperature, deserts, ecophysiology, *Arthropoda*, *Insecta* 5710.

- temperature effects, workers, *Atta laevigata*, *Atta sexdens rubropilosa* 4174.

Oxygen depletion,

- effects on stored products pests, *Acarina* 1395.

- freshwater environment, indicator species, larvae, *Ephemeroptera* 3852.

Oxygen exchange,

- buoyancy, hemoglobin physiology, aquatic animals, *Anisops assimilis* 1743.

- retina, dark, *Apis mellifera* 183.

Oxyopidae,

- new records, predators, *Spodoptera litura*, India, Andhra Pradesh 1439.

Oxyopoda besucheti,

- new species, taxonomy, morphology, Switzerland 7621.

Oxytelus lateralis,

- developmental stages, morphology 4931.

Oxytelus tarandus,

- food utilization, enzyme activity 7320.

- food utilization, metabolism, carbohydrates 7309.

- food utilization, metabolism, sugars 7321.

- fructose metabolism 7322.

- pest, crop fields, *Cajanus cajan* 4553.

Oxytauchira brachyptera,

- new species, morphology, China, People's Rep. 847.

Oxytelus,

- geographical distribution, keys 2371.

Oxytelus incisus,

- new records, USA, Florida 2371.

Oxytelus pennsylvanicus,

- new records, USA, Florida 2371.

Oxytelus sculptus,

- new records, geographical distribution, Haiti 2371.

Oxythreia,

- phylogeny, geographical distribution, morphology, Mediterranean Region 1704.

Ozone,

- fumigation, chemical control, bluetongue virus vectors, biological safety cabinets, *Culicoides variipennis* 8477.

- pest control, fumigation, vectors, bluetongue virus, *Culicoides variipennis* 4519.

Ozophora atropica,

- taxonomy, geographical distribution, South America 2370.

Ozophora parapieta,

- new species, morphology, South America 2370

Pacellomyces farinosus,

- pathogenicity, pests, *Insecta* 1001

Pacemakers,

- transplantation, circadian rhythms, locomotor activity, *Acheta domesticus* 6527.

Pachodynerus nasidens,

- nesting behavior, mating behavior, parental behavior, reproductive strategy 6662.

Pachyandrium semileueum,

- new species, taxonomy, morphology, Arabia 5596.

Pachybrachis alpinus,

- new species, taxonomy, morphology, France 8765.

Pachybrachis bilobata scutellatus,

- vectors, disease transmission, *Phytomonas davidi* 8363

Pachynema hippocastanaria,

- population genetics, inheritance, phenotypes, *negrescens* 6285

Pachycondyla,

- defense mechanisms, foaming 476

Pachycrepoides vindemiae,

- pupae parasites, biological control, *Musca domestica* 708

Pachylia syces,

- hosts, parasites morphology, *Belvosia bicincta* 6755

Pachymetinae,

- taxonomy, morphology, Brazil 6374

Pachynematus angustatus,

- taxonomy, synonymy, *Pachynematus smithae* 4034.

Pachynematus arcticus,

- occurrence, British Isles, Scotland 9452

Pachynematus smithae,

- taxonomy, synonymy, *Pachynematus angustatus* 4034

- Pachyneuron concolor**, hyperparasitism, host preferences, oviposition, development, *Microterys flavus* 5177
- Pachypeltis gigas**, new species, taxonomy, morphology, Borneo, Sarawak 4851
- Pacific Ocean, Northwest**, population dynamics, annual variations, environmental factors, *Vespa vulgaris*, *Vespa pensylvanica* 1268
- Pacifilulus**, new genera, taxonomy, morphology 6465
- Pacifilulus imbricatus**, new species, taxonomy, morphology, USSR 6465
- Paculidae**, taxonomic revision, systematics, Tetrablemmidae 4767
- Paddy fields**, abundance, species composition, Arthropoda 5261, agricultural practices effects on breeding, abundance, Culicidae, USA, Louisiana 2920, damage, infestation prediction, *Tryporyza incertula* 3001
- Paeloniomyces farinosus**, infection, penetration mechanisms cuticle, *Bemisia tabaci* 9003, pathogens, infection, *Lymantria dispar* 5741, pathogens, mortality, *Synanthedon salmachis*, New Zealand 4415
- Paderus besucheti**, new species, taxonomy, morphology, India, Sri Lanka 4809
- Paderus fuscipes**, predator-prey interactions, *Nilaparvata lugens*, new records, geographical distribution, India 3565
- Paderus loebli**, new species, taxonomy, morphology, India, Sri Lanka 4809
- Paderus melanopus**, predator-prey interactions, *Nilaparvata lugens*, new records, geographical distribution, India 3565
- Paderus mussardi**, new species, taxonomy, morphology, India, Sri Lanka 4809
- Pagastia**, morphology, larvae 8038
- Pagelmis**, new genera, taxonomy, Ecuador 4790
- Pagelmis amazonica**, new species, taxonomy, morphology, Ecuador 4790
- Pagomyia rufus rugosus**, anti-predator behavior, foraging behavior, interspecific relationships, *Latrodectus hesperus* 6731
- Pairing**, mate selection, interspecific relationships, Odonata 3522, mating, rearing methodology, *Culex pipiens fatigans* 8853
- Pakistan**, disease transmission, malaria, *Anopheles* 2911, host plants, infestation, phenology, *Smicronyx*, *Cuscuta* 9157, mating behavior, population dynamics, capture-recapture studies, *Anopheles culicifacies* 7602, new species, taxonomy, morphology, *Adamysia coineau* 7150, new species, taxonomy, morphology, *Neurotenus lematophilus* 5577, population dynamics, life cycle, *Empoasca kerr* 9161, soil properties, mounds, nest building, *Isopora* 9369
- Pakistan, Lahore**, new records, geographical distribution, Araneae 9488
- Pakistan, Punjab Province**, population levels, seasonal variations, *Anopheles culicifacies*, *Anopheles stephensi*, *Anopheles subcinctus* 3650, water temperature, effects on development, survival, immature stages, *Anopheles culicifacies* 6697
- Paktongius distinctus**, morphology, males, Thailand 5550
- Palaearctic**, geographical distribution, *Ectreposthousa* 811
- Palaearctic Region**, taxonomy, morphology, *Amblyseius umbratus* 8723, taxonomy, synonymy, Sphecidae 8828
- Palaorhiza**, new species, taxonomy, morphology, 8 species, Papua New Guinea, Papua New Guinea 4885
- Palaorhiza amoena**, taxonomy, new species, morphology 1656
- Palaorhiza convexa**, taxonomy, new species, morphology 1656
- Palaorhiza cyanea**, taxonomy, new species, morphology 1656
- Palaorhiza delicata**, taxonomy, new species, morphology 1656
- Palaorhiza gratiosa**, nesting behavior, morphology, adaptations 1656
- Palaorhiza kraussi**, taxonomy, new species, morphology 1656
- Palaorhiza nasalis**, taxonomy, new species, morphology 1656
- Palaorhiza parvula**, taxonomy, new species, morphology 1656
- Palaorhiza pembertonii**, taxonomy, new species, morphology 1656
- Palaorhiza simulana**, taxonomy, new species, morphology 1656
- Palaorhiza speciosa**, taxonomy, new species, morphology 1656
- Palaorhiza variabilis**, taxonomy, new species, morphology 1656
- Palatability**, host plants trees, herbivory, coevolution, Insecta, British Isles 2846
- Palaearctic Region**, collections, Hungarian Natural History Museum, geographical distribution, phenology, *Oligia* 8674, new records, geographical distribution, morphology, genitalia, *Metacalia pruinos* 4715, new records, geographical distribution, *Sussaba placita* 4031
- Paleoclimatology**, environmental conditions, fossils, plants, Insecta, USA, Minnesota 791, paleoenvironments, community composition, Norway, Insecta 4750
- Paleoecology**, environmental changes, vegetation, species composition, Coleoptera, USA, New York, Lockport 7127, environmental conditions, fossils, plants, Insecta, USA, Minnesota 791, Insecta, Upper Carboniferous, USA, Pennsylvania 2376
- Paleoenvironments**, paleoclimatology, community composition, Insecta, Norway 4750
- Paleontology**, phylogeny, reviews, Insecta 3135, taxonomy, synonymy, fossils, Pleistocene epoch, Scarabaeidae, USA, California 2404
- Pales pavid**, parasites, mass rearing, fecundity, larvae development, *Galleria mellonella* 510
- Paleontones**, DNA, characterization, *Drosophila melanogaster* 2338
- Palmacorix nana**, body weight effects on homosexual behavior, males 1892
- Palmacorix nana**, social environment, effects on auditory communication, phonotaxis, breeding success 9077
- Palmacorix nana**, stridulation, courtship, mounting behavior, copulation 4300
- Palmiculator palmarius**, new records, Bahama Is. 1580
- Palaemon prasinus**, correlation analysis, body length, body weight, energy content 51, population dynamics, abundance, seasonal variations, forests, Czechoslovakia 1283
- Paltichyrs tarsatus**, relationship, association, *Tilachlidopsis catenulata*, *Cordyceps myrmecophila*, Ivory Coast 6608
- Palystes natalius**, bites, medical importance 645
- Palythoa**, palytoxin, effects on giant axons, *Periplaneta americana* 8176
- Palytoxin**, effects on giant axons, *Periplaneta americana* 8176
- Pamphilus lanatus**, new species, taxonomy, morphology 8829
- Pamphilus sylvanus**, morphology, taxonomy 8829
- Panama**, abundance, seasonal variations, Blattaria 2890, apiculture, production 2212, association, phoresy, Scolocryptini, Meliponinae 5227, chemical control, malathion, rain-forest, *Phlebotomus* 1831, colonial characteristics, reproductive strategy, *Nasutitermes corniger* 3845, colonies, dispersal, spatial distribution, Formicidae 4649, competition, nectar, foraging behavior, *Phaenotermes*, *Ingona ferricauda* 4409, dung utilization, forests, *Urosyrgus*, *Notobius parisi* 8370, feces, attractancy, Reptilia, Amphibia, Scarabaeidae 5134, geographical distribution, new records, new species, *Anchylorhynchus bicarinatus* 1614, host preferences, disease transmission, *Leishmania*, *Trypanosoma*, *Lutzomyia* 653, life history, developmental stages, *Dysodia sica* 1986, morphology, identification, geographical distribution, *Nonarthrus cyaneum* 7126, nests, design comparison, *Nasutitermes corniger*, *Nasutitermes ephrae* 1958, new genera, new species, *Woldana*, *Woldana campana* 2439, new records, geographical distribution, *Baluchita* 6422, new species, morphology, taxonomy, Culicidae 3205, new species, morphology, taxonomy, *Mycomya goethalsi* 1625, new species, new genera *Ghihiellia*, *Bunnotus* 1634, new species, taxonomy, morphology, *Barutis hartmanni* 7950, new species, taxonomy, morphology, geographical distribution, Scarabaeidae 6376, new species, taxonomy, morphology, *Guianella nematocera*, *Guianella pilosa*, *Guianella truncatula*, *Guianella tuberculifrons* 4858, new species, taxonomy, morphology, *Gyponana fortuna*, *Gyponana boquetea*, *Gyponana chiriqua* 4017, 11 new species, taxonomy, morphology, keys, *Xestocephalus* 7201, new species, taxonomy, morphology, *Paradamoetas changuunola* 7149, new species, taxonomy, morphology, *Sandersellus panamensis* 6421, new species, taxonomy, morphology, *Terulia woldai* 8805, occurrence, taxonomy, *Stenomema mexicana* 3166, parasites, colonies, *Mattiroella crustosa*, *Nasutitermes corniger*, *Nasutitermes ephrae* 4193, Parasites host selection, disease reservoirs, *Rhodnius pallens*, *Mammalia* 667, parasites, infection, pathology, *Mattiroella crustosa*, *Nasutitermes* 4199, pollinators, foraging behavior, effects on reproduction, outcrossing, *Cochlospermum vitifolium*, *Centris* 6787, pollinators, *Melipona interrupta*, predators, larvae, *Comptosieridae*, synchronization, reproductive strategy, *Hybanthus profluvius* 2080, species composition, species richness, association, plant communities, *Costus*, Formicidae 8344, taxonomic revision, *Pseudolobetus championi*, *Pseudolobetus major* 7943
- Panama, Barro Colorado**, new species, taxonomy, morphology, *Mycomya goethalsi* 4833
- Panama, Darien, Santa Fe**, new records, range extension, *Apis mellifera* adansonii 5337
- Panama, Gamboa**, courtship, mating behavior, diets, Mallophora schwarz 6681
- Panama, Porto Bello**, new species, taxonomy, morphology, *Platyscus hemiruber* 4848
- Panasonomops sulcifrons**, new records, geographical distribution, Belgium 9483
- Pancras**, proteins, immunochemistry localization, brain, *Eristalis aenus* 2523
- Pandemis ceranaea**, sex pheromone, biochemical analysis 4166
- Pandemis heparana**, diurnal variations, flight patterns 52, flight activity, diurnal variations, measuring techniques, pheromone traps 472, larvae, histology, ultrastructure, baculovirus infection 1825
- Panicum coloratum**, grasses, habitat preference, hibernacula, *Hippodamia convergens* 7625

- Panicum miliare**,
host plants, damage, new records, Orseolia 1242.
- Panicum millacium**,
host plants, pests, damage, susceptibility, *Antherigona vana soccata* 7704
- Panolis flammea**,
pest control, pheromones 3710
sex pheromone, chemical composition 8973
- Panonychus citri**,
chemical control, milbemeyns, toxicity 2662
ectoparasites, ecological distribution, *Prunus amygdalus*, USA, California 1391
ovicides, cycloprate, bioassays 7398
pest control, acaricides, milbemeyns, antibiotics, *Streptomyces hygroscopicus aureolacrimosus* 5309
viruses isolation, characterization, morphology 8142
- Panonychus ulmi**,
biological control, predation, *Coniotetranychus esbenpetterseni*, Italy 2813.
chemical control, pesticides, efficacy, comparative studies 680
ectoparasites, ecological distribution, *Prunus amygdalus*, USA, California 1391
nontarget organisms, diflubenzuron effects on, pest control, *Laspeyresia pomonella* 8562
overwintering eggs, diapause termination, temperature effects on 8214.
ovicides, cycloprate, bioassays 7398
pest control, cyhexatin 9300
pest control, pesticides, toxicity, *Malus* 297
pest resistance, clones, host plants, *Malus domestica* 5312
pesticide resistance, binopacryl, tetradifon, genetic analysis 7870
pesticide resistance, pesticides (organophosphorus), genetic analysis 7869
pests, predators efficiency, environmental factors, orchards, *Malus* 8398
predator-prey interactions, *Amblyseius fallacis* 560
predatory interactions, orchards, spatial distribution, population dynamics, predators 6211.
stored products pests, atmospheric conditions effects on 1395.
susceptibility, *Venturia inaequalis* pest resistance, genes, *Malus* 6204.
- Panorpa pryeri**,
digestive tract, morphogenesis, embryogenesis 3458
- Panorpida**,
morphology, evolution, panorpoid complex, taxonomy 1592
- Panstrongylus magistus**,
disease transmission, *Trypanosoma cruzi*, Brazil 5286.
- Panstrongylus megistus**,
juvenile hormones analogs, effects on genitalia morphology 5089.
juvenile hormones, analogs, structure-activity relationships, vectors, Chagas disease 5000
- Pantala flavescens**,
flight activity, slope soaring behavior, aerodynamic properties, energy expenditure 5137
- Pantorhytes**,
pest control, chemical control, biological control, New Guinea 2989
- Peckicia**,
new taxa, Africa 33.
- Papaya**,
new records, hosts, *Coccus hesperidium*, *Anenetus ceroplastae*, India 2040
- Papilio**,
oviposition, host plants, attractants 3594.
- Papilio bianor dehaenei**,
oviposition, host plants, attractants 3594.
- Papilio demoleus**,
malpighian tubules, histology, anatomy, larvae 8930.
nuclear polyhedrosis virus infection, symptoms 290.
- Papilio glaucus**,
natural selection, pupation, site location 6293.
oviposition mistakes, host plants toxicants, larvae development, *Angelica atropurpurea* 8247
- Papilio glaucus canadensis**,
host plants, oviposition, larvae survival 3595.
- Papilio indra panamistensis**,
new subspecies, taxonomy, morphology, USA, California 7223
- Papilio indra phyllaeae**,
new subspecies, taxonomy, morphology, USA, California 7223.
- Papilio machaonathjensi**,
status, taxonomy, morphology 7229
- Papilio polyzeme**,
protandry, larvae growth, pupae duration 6725
- Papilio polyxenes**,
growth, host plants, chemical composition, furanocoumarins, xanthotoxin, Umbelliferae 5968
- Papilio polyxenes asterius**,
mating frequency, effects on eggs fertility 7491
- Papilio protenor demetrius**,
oviposition, host plants, attractants 3594.
- Papilio xuthus**,
pupae, coloration, external stimuli, environmental factors 2602
- Papilio xuthus**,
mortality, host plants, food quality, leaves, xanthoxylum ailanthoides 7563
oviposition, host plants, attractants 3594.
population dynamics, life history, population regulation 2859
- Papilio zelicaon**,
weeds toxicity, *Conium maculatum*, USA, California 8353.
- Papilionidae**,
herbivores, phototoxicity, Umbelliferae, furanocoumarins, USA, New York 2079
life history, food plants, sympatric populations, Brazil 5233
- Papilionidea**,
species diversity, abundance, USA, Illinois 1952.
- Papilionoidea**,
diapause, overwintering, North America 6880
- Papilio**,
defence secretions, chemical composition, larvae 2611
- Papilio bianor**,
defence secretions, chemical composition, larvae 2611
- Papilio helenus**,
defence secretions, chemical composition, larvae 2611.
- Papilio maackii**,
defence secretions, chemical composition, larvae 2611.
- Papilio machaon**,
defence secretions, chemical composition, larvae 2611.
- Papilio memnon**,
defence secretions, chemical composition, larvae 2611.
- Papilio xuthus**,
defence secretions, chemical composition, larvae 2611.
- Papilio xuthus**,
testes development, spermatogenesis 4272.
- Papua New Guinea**,
chemical composition, defence secretions, Nasutitermitinae 255.
new genera, new species, taxonomy, morphology, *Trogloaenon novahiberniae* 4814.
new species description, Acari 6.
new species, new genera, *Garaianinis antennatus*, *Roundomiris punctatus* 4851.
new species, parasites, *Whartonia kulamadouensis*, *Dobsonia pannietensis* 797.
new species, *Pseudostegana* 3990.
new species, taxonomy, identification keys, Radfordiana, Schoengastia, Schoengastia niohe 4763
new species, taxonomy, morphology, *Heteromurus multispinus* 3988.
new species, taxonomy, morphology, *Sasatrombicula umboniensis* 8728.
new species, taxonomy, morphology, *Sigara papuensis* 4748.
new species, taxonomy, morphology, *Sigara papuensis* 8800.
6 new species, taxonomy, morphology, *Trombicula* 6339.
new species, taxonomy, morphology, 8 species, *Palaeorhiza* 4885.
new subspecies, taxonomy, morphology, *Dimorphopterus cornutus* 3211.
pests, geographical distribution, taxonomy, *Coccus celatus* 3215.
taxonomic revision, new species, 5 species, *Eostegana* 3989.
- Papua New Guinea, New Britain**,
new species, taxonomy, morphology, *Trombicula novabritaniae* 4762.
- Parabahaia lamina**,
new species, taxonomy, morphology, South America 5587.
- Parabahaia thalia**,
new species, taxonomy, morphology, South America 5587.
- Parabemisia myricae**,
parasites, introduced species, biological control, predators, USA, California 1435.
- Parabietia areolata**,
new species, taxonomy, morphology, Brazil 8840.
- Parabietia callosa**,
new species, taxonomy, morphology, Brazil 8840.
- Parabietia stylifera**,
new species, taxonomy, morphology, Brazil 8840.
- Parabietia tapiripes**,
new species, taxonomy, morphology, Brazil 8840.
- Parabietia dubitata**,
new species, taxonomy, morphology, Brazil 8840.
- Parabuloponinae**,
taxonomy revision, new genera, identification keys 1640.
- Parabupares**,
new genera, taxonomy 7155.
- Parabupares robustus**,
new species, taxonomy, morphology, Borneo 7155.
- Paracalliope fluviatilis**,
life history, New Zealand, Waitakere R. 451.
- Paracantha culta**,
life history, predators, seeds, *Cirsium canescens* 5884.
predators, seeds, life history, destruction, population density, *Cirsium canescens* 9105.
- Paracarnus cubanus**,
new records, geographical distribution, USA, Florida 5534.
- Paraceratoppia**,
new genera, taxonomy 6341.
- Paraceratoppia meridionalis**,
new species, taxonomy, morphology, USSR 6341.
- Parachironomus forceps**,
feeding behavior, larvae, predation, eggs, ponds, *Ambystoma maculatum*, Canada, Quebec 1203
- Parademesia**,
taxonomy, morphology, keys 4898.
- Paracobiella fulvescens**,
excretory products, uric acid 928
- Paracora maculifemora**,
new species, taxonomy, morphology, Italy 6455.
- Paracrepidaspis wilkeyi**,
taxonomy, new genera, new species, morphology 1644.
- Paracryphonoxys africanus**,
parasites, host searching behavior, oviposition 9132.
- Paradamoetas changuola**,
new species, taxonomy, morphology, Panama 7149.
- Paradamoetus**,
keys, morphology 7149
- Paradiplosis tumifex**,
galls, host plants, *Abies balsamea* 6805
- Paradrina**,
males, females, genitalia, morphology, anatomy 2666
- Paradrina susianja**,
new species, taxonomy, morphology, Yugoslavia 4893.
- Parades**,
taxonomic revision, identification keys, geographical distribution, bionomics, 8 species, Oriental Region 6410.
- Parafilaria bovicola**,
pathogens, infection, development, *Musca xanthomelas*, *Musca lusoria* 5725.
- Paragasporia**,
new genera, taxonomy, morphology, Africa 7939.
- Paragnetina**,
taxonomy, morphology 6456
- Paragnetina fattigi**,
synonymy, *Paragnetina kansensis* 6456
- Paragnetina ichusa**,
new species, taxonomy, morphology 6456
- Paragnetina kansensis**,
synonymy, *Paragnetina fattigi* 6456
- Paragnetina ledoensis**,
new species, taxonomy, morphology 6456.
- Paraguay**,
aggregation behavior, activity patterns, *Epicada hymenaea* 7589.
brood care, paternal behavior, eggs, males, *Belostoma micantulum* 1147
geographical distribution, bionomics, species composition, Tabanidae 7125.
new species, taxonomy, morphology, *Brasilianus fraterculus* 8752
- Paraguay, Chaco Basin**,
new species, taxonomy, morphology, *Trachymyrmex kempi* 5595

- Paragus autotettax**,
new species, taxonomy, morphology, France, Corsica, Sardinia 8793.
- Paragus aeneus**,
new species, taxonomy, morphology, France, Corsica, Sardinia 8793.
- Parajapyx alienus**,
new species, taxonomy, morphology, West Indies, Saint Lucia 4823.
- Parakanchia**,
taxonomy, morphology, geographical distribution, New Guinea 837.
- Parakanchia irregularis**,
morphology, geographical distribution, New Guinea, Parakanchia cyclops,
morphology, geographical distribution, New Guinea 837.
- Parakanchia opaca**,
morphology, geographical distribution, taxonomy, New Guinea 837.
- Paraleptophlebia submarginata**,
growth, productivity, life cycle 7012.
- Paraleucopsis**,
keys, identification, Mexico, California Gulf 2425.
- Paraleucopsis mexicana**,
ecology, geographical distribution, habitat, phylogeny, Mexico, Sonora, Kino Bay 2864.
- Paraleucopsis**,
new species, taxonomy, morphology, Mexico, California Gulf 2425.
- Paralimnosa anaptera**,
new species, taxonomy, morphology, Canary Is. 7969.
- Paralimnosa franzi**,
new species, taxonomy, morphology, Canary Is. 7969.
- Paralimnosa gomesae**,
new species, taxonomy, morphology, Canary Is. 7969.
- Paralimnosa piliformata**,
new species, taxonomy, morphology, Canary Is. 7969.
- Paraliris krichbaumeri**,
geographical distribution, morphology, Oriental Region 9490.
- Paraliris sycorax**,
geographical distribution, morphology, Oriental Region 9490.
- Paraliris truncatus**,
geographical distribution, morphology, Oriental Region 9490.
- Paraluederwaldtia caramaschii**,
new species, taxonomy, morphology, Brazil 8738.
- Paralysis**,
temperature effects, effects on reproduction, *Anthonomus grandis* 1105.
toxicity, mycotoxins, *Entomophaga egressa*, *Choristoneura fumiferana* 5798.
toxins, infestation, *Argas persicus*, *Argas africanus* 1352.
venom, biochemical analysis, *Phyllanthus triangulum* 4215.
venom, hyperparasitism, *Aphidius smithi*, *Asaphes lucens* 2820.
- Paramebia**,
new genera, Cleradini, Australia 3210.
- Paramecium caudatum**,
lysis, hemolymph, larvae, *Choristoneura fumiferana* 5026.
- Paramixia carmeliana**,
new records, geographical distribution, USA, Florida 5534.
- Paramoecerus**,
taxonomic revision, morphology, Brazil 6364.
- Paramussardia**,
new genera, taxonomy, morphology, Africa 7939.
- Parameylois transiella**,
hosts, parasites life cycle, *Goniozus emigratus* 6754.
- Paranapalacaba waterhousei**,
disease transmission, vectors, bean curly dwarf mosaic virus, bean mild mosaic virus, Costa Rica 7658.
- Parandra**,
taxonomic revision, synonymy 6505.
- Parandra caspia**,
taxonomy, morphology 6372.
- Parandriinae**,
taxonomy, morphology 6372.
- Paraoxon**,
biodegradation, pesticide resistance, *Sancassana berlesae*, *Tetranychus urticae* 808.
- Parapatellella eugeniae**,
new species, new genera, taxonomy, morphology, USSR, Ukraine 7218.
- Parapatric populations**,
geographical distribution, surveys, *Aponomma hydrosauri*, *Amblyomma albolineatum*,
Australia, Western Australia 5218.
- Parasarcophaga**,
systematics, geographical variations, morphology, *Lycena xanthoides*, USA,
California 7123.
- Parasarcophaga**,
morphology, ultrastructure 7279.
- Parasphlepius irritatus**,
X disease vectors, factors affecting orchards colonization 6173.
- Parapoxyn badialis**,
host-parasite interactions, *Mynophyllum spicatum* 527.
- Parapoxyn rugosalis**,
host specificity, aquatic weeds, *Hydrilla verticillata*, USA 2204.
- Paraspeche cardis**,
secondary production, food consumption, USA, Georgia 2291.
- Parasphlepius nestoris**,
infestation, habitat, *Muscula erminea*, New Zealand 8332.
- Parasaissetia nigra**,
eggs, parasites, new records, *Scutellista cyanea*, India, Maharashtra 7540.
- Parasarcophaga crassipalpis**,
morphology, immature stages, Australia 2504.
- Parasarcophaga omega**,
morphology, immature stages, Australia 2504.
- Parasarcophaga reposita**,
morphology, adults, developmental stages 4927.
- Parasarcophaga ruficornis**,
strike, man, Thailand 4499.
- Paraschoengastia magnatarsala**,
new species, taxonomy, morphology, Venezuela 8727.
- Parasclitus parva**,
new species, Nigeria 1588.
- Parasclitus relictus**,
new species, Nigeria 1588.
- Parasetigena silvestris**,
traps, catches, oviposition 55.
- Paraslerola**,
life cycle, feeding, parasitoids, *Pectinophora gossypiella* 6771.
- Parasitaphelenchus**,
parasitism, *Ips sexdentatus* 6879.
- Parasite resistance**,
biological control, *Ixodidae*, *Unguiculata*, Zimbabwe 633.
hardwoods effects on feeding behavior, *Bulbifermes besooni* 481.
host-parasite interactions, *Legumes*, *Zygneta diva* 695.
Medicago sativa, seedlings, *Acyrthosiphon kondoi*, *Therioaphis trifolii* 549.
- Parasites**,
abundance, *Arthropoda*, *Rodentia*, Egypt, Arab. Rep. 3588.
abundance, crop fields, *Trifolium alexandrinum*, *Insecta*, Egypt 6876.
abundance, digestive tract, diurnal variations, *Thelastoma bulbosus*, *Periplaneta americana* 2643.
abundance, host-parasite interactions, *Metopopolium dirhodum*, *Sitobion avenae*,
Hymenoptera 1228.
abundance, *Mallophaga*, *Acarina*, *Phalacrocorax auritus*, USA, Florida 5948.
abundance, seasonal variations, *Copidosoma koehleri*, *Apanetes subundans*, *South Africa* 2122.
aggregation behavior, *Megarhysa* 1481.
aggregation, habitat, larvae, *Dermacenter albiguttatus*, Canada, Alberta 9181.
Aneristis ceroplastae, hosts, *Coccus hesperidum*, new records, papaya, India 2040.
apiculture, biogeography 5760.
Apoccephalus effects on competition, defensive behavior, *Pheidole dentata*,
Solenopsis terrena 3576.
aquatic organisms, *Acarina*, *Insecta* 7022.
asexual reproduction, adaptations, aquatic environment, *Entomophthora conica*,
Entomophthora thizospora, *Insecta* 1009.
association, nests, *Osmia marginata* 1965.
attachment, gut, malpighian tubules, *Herpetomonas amepophilae*, *Drosophila melanogaster* 3408.
attachment sites preferences, *Lepus* 8321.
attractants, volatiles, *Hibiscus esculentus*, *Gossypium*, *Eucaloria* 4321.
antecology, books, *Insecta* 8708.
Babesia bovis, effects on, fecundity, oviposition, hosts, *Boophilus microplus* 2038.
biological control, *Gascardia destructor* 2938.
biological control, malaria vectors, *Romanomermis culicivora*, *Anopheles albimanus*, El Salvador 7645.
biological control, mass rearing, *Howardia huseyi*, *Megaselia halterata* 3027.
biological control, *Musca domestica*, pupae, *Muscidifurax raptor*, *Pachytrephoides vindemiae*, *Spalangia cameroni*, *Spalangia endius*, *Spalangia nigroaenea*, *Spalangia drosophilae* 708.
biological control, pest control, *Aphytis holozanthus*, *Chrysomphalus aspidum*,
USA, Texas 3758.
biological control, pest control, greenhouse, *Trialeurodes vaporariorum*,
Encarsia formosa, Japan 7789.
biological control, pest control, population levels, *Aleurocanthus woglumi*, USA,
Florida 2946.
biological control, pest control, *Trialeurodes vaporariorum* 7778.
biological control, pest outbreaks, *Aleurocanthus woglumi*, USA, Florida 1420.
biological control, pests, field trials, *Neoleptanthe bibionis*, *Synanthedon tipuliformis* 7767.
biological control, pests, *Neoleptanthe bibionis*, *Synanthedon tipuliformis* 2207.
biological control, pests, *Persea americana*, Israel 5390.
biological control, predation, *Scarabaeidae*, *Taenia saginata*, Kenya 1317.
biological control, suitability tests, *Chrysomelids* 1217.
biological morphology, *Phasmodia*, *Goniodes* dispers, *Menopon pallens*,
Cuculotaster heterogrammus, *Cuculotaster heterogrammus*, *Goniodes colchici*,
Spain, Cordoba 8045.
body weight, growth, host-parasite interactions, *Gonia cinerascens* 2825.
Boophilus annulatus, *Boophilus microplus*, oviposition, timing, seasonal
variations, cattle 1916.
Carya pecan pests, *Monella caryella*, USA, Texas 6155.
cattle, pest outbreaks, *Pooropoda*, USA 5281.
cattle, sampling methodology, *Hypoderma lineatum*, *Hypoderma bovis* 1681.
cattle, surveys, *Arthropoda*, Bulgaria 4497.
check lists, *Arthropoda*, *Mammalia*, New Zealand 1231.
chemical control, acaricides, cattle, *Boophilus microplus* 5278.
chemical control, cylluote, *Ixodidae*, *Siphonaptera* 4518.
chemical control, karanj oil, *Capra*, *Sarcoptes scabiei* 8407.
chemical control, sulphonamides, *Malameba locustae*, *Acrididae* 1002.
chemotherapy, apiculture, drugs distribution, colonies, *Apis mellifera* 8570.
Chiroptera, morphology, *Alabodocarpus minor*, *Alabodocarpus nyalis*,
intercalatus, *Alabodocarpus pleocis*, Belgium 5652.
cocones, abundance, life cycle, *Dipron pini* 7541.
colonies damage, *Vitroa jacobsoni*, *Apis cerana* 4380.
colonies, effects on survival, reproduction, *Mattrorella crustosa*, *Nasutitermes*
coniger, *Nasutitermes ephraei* 4193.
competition, hosts, *Lymantia dispar*, *Apanetes melanoscus*, *Rogas lymantiae*
7545.
competition, sexual reproduction, *Aponomma hydrosauri*, *Amblyomma albolineatum*,
Amblyomma 5930.
Complexionism, *Antheraea pernyi*, China, People's Rep., Liaoning Province 6007.
control programs, biological control, *Trialeurodes vaporariorum*, *Encarsia formosa*
1424.
Cortetarsotominae, *Hemiptera*, Asia, Australia 1581.
detection methodology, *Siphonaptera* 2483.
detection methodology, vectors, *Tyrpanosoma longiculi*, *Rhodnius prolixus* 4486.
development, diflubenzuron effects on, *Biositer longicaudatus*, *Anastrepha*
suspensa 357.
development, *Hepatopozon erhardovae*, *Siphonaptera* 4183.
development, hosts population density, *Galleria mellonella*, *Gonia cinerascens*
3829.
development, *Latomosoides carinii*, *Ornithonyssus bacoti* 2634.
development, *Plasmodium*, *Culicidae* 2625.
diagnosis, symptoms, *Sarcoptes scabiei hominis* 9269.
digestive tract, *Holophrynchus raudugius*, *Agriotes pygmaea*, India 1000.
digestive tract, life cycles, *Stenoductus chondronomphi*, *Chondromorpha kelaarti*
4182.
discrimination, hosts infection, nuclear polyhedrosis virus, *Apanetes*
melanoscus, *Lymantia dispar* 5942.
disease transmission, cattle, *Hyalomma marginatum* fufupes, new species, *Babesia*
occultans 6065.
disease transmission, malaria, *Plasmodium*, *Anopheles* 729.
disease transmission, *Nematoda*, *Hyalomma anatolicum*, *Boophilus microplus*, India
2183.

Parasites, (continued)

- disease transmission, Susceptibility, *Sarcoptes scabiei*, Canidae 1331
dispersal, biological control, *Aleocharatus woglumi*, *Amutis hesperidum*, Encarsia opulenta, USA, Florida 4544
dispersal, wind, *Schoenus fulgidus* 4451
distribution, host plants, *Lygus*, *Nabis*, *Spissistilus festinus* 8384
domestic animals, control programs 1418
ecological distribution, host preferences, *Ixodes matopi*, Mammalia, Zimbabwe 519
ecology, abundance, distribution, habitat, 33 species, Ixodoidea, Ethiopia 1309
effects on hemolymph cells, *Plagiorynchus cylindraceus*, *Armadillidium vulgare* 1012
effects on hosts, castration, *Cuterebra emasculator*, *Cuterebra tonitruella* 6378
effects on hosts development, *Copidosoma truncatellum*, *Trichoplusia ni* 8727
effects on hosts emergence, *Microctonus vittatae*, *Phylloreta cruciferae*, *Phylloreta strolata* 8316
effects on hosts morphology, *Mermithoidea*, *Einfeldia dissidens* 7393
effects on hosts, pathology, biological control, *Mermithidae*, *Simulium* 3403
effects on hosts, pathology, biological control, *Mermithidae*, *Insecta* 3749
effects on hosts physiology, *Mermithidae*, *Insecta* 3404
effects on pest outbreaks, agricultural practices, *Leptomastix dactylopi*, *Phanococcus citri* 675
effects on photosynthesis, *Aphis craccivora*, *Vigna sesquipedalis* 524
effects on population density, protozoa, *Tipula paludosa*, North America 2907
effects on population levels, *Macrocercus grandis*, *Osmia nubilalis* 5356
effects on population levels, *Rhinocylus conicus* 5993
effects on rabbits, *Amblyomma hebraeum* 673
effects on yield, *Aphis craccivora*, *Vigna sesquipedalis* 529
eggs, *Chironomidae*, new species, *Cochlea circumpleta* 2152
eggs encapsulation, *Metaphysus swirskii*, *Saissetia oleae* 5175
eggs, *Leptostoma undecimlineata*, *Edovum putieri*, Colombia 2454
eggs, *Leptostoma undecimlineata*, *Edovum putieri*, Colombia 2454
eggs, *Macrosetia surfacea*, *Orechelmium fulvum*, USA, Florida 5187
eggs, *Oryzia pseudosugata*, biology, *Telenomus californicus* 2014
emergence, infestation, *Trifurcula cryptella*, *Coleophora discolorata* 5180
emergence, temperature effects, *Limonysa satvae*, *Diplyphus intermedius*, *Chrysotoxoma formosa* 1469
Eucelatoria armigera hosts, *Heliothis armigera*, capture-recapture studies, infestation, establishment, India, Bangalore 2159
exploratory behavior: silk exposure time, diurnal variations, *Apanetes melanoscelus*, *Lymantia dispar* 1219
factors affecting population decline, pest outbreaks, *Apanetes ruficus*, *Mystina separata*, India 5301
feeding behavior, *Arrenurus*, *Zygopora* 6762
feral populations, *Felis*, *Ctenocephalides felis*, *Echinophaga*, *Spilopsyllus cuniculi*, *Ctenocephalides canis*, *Nosopsyllus fasciatus*, *Felicia subrostrata*, *Oxodectes cynotis*, *Cheyletiella*, *Ixodes tamsani* 511
first record, *Coleomymus africanus*, *Mermithidae*, *Culicidae*, Angola 1271
food preferences, food plants, *Ampiphysa pyramidea*, *Ampiphysa berbera* *svenssoni* 4338
forests, infestation, mathematical models, *Dendroctonus frontalis* 683
fumigation, antallatropin precocene 2(P2), effects on embryogenesis, *Dermacentor variabilis* 9344
geographic distribution, *Psittacus esakii*, *Pseudipis mandschurica*, Japan 2445
geographical distribution, *Ampiphysa quadratigata*, host preferences 783
geographical distribution, abundance, *Chrysoschelus laricellae*, *Coleophora laricella*, North America 3028
geographical distribution, *Amblyomma*, *Aponomma*, *Reptilia*, Australia 3584
geographical distribution, birds, *Ereynetidae*, USA, Hawaii 795
geographical distribution, food plants, British Isles, *Melanargia galathea* 9091
habitat, nesting behavior, feeding, *Osmia maritima* 6851
Halarachne halbacheri, *Orthohalarachne attenuata*, *Orthohalarachne dimunata*, *Ereynetidae*, *Phoca viridula*, *Phoca largia*, USA, Alaska 4385
hardwoods parasite resistance effects on, *Bifidifemur besoni* 481
hematophagy, effects on blood, *Bubalis bubalis*, *Haematopis tuberculatus*, India 5280
host plants effects on, biological control, *Myzus persicae* 723
host plants, emergence, *Metzneria aprilis* 5140
host preferences, life cycle, *Nosopsyllus conicus* 7548
host preferences, reproduction, *Sturmipis infers* 1216
host searching behavior, dispersal, *Trichogramma pretiosum*, USA, Georgia 2023
host searching behavior, oviposition, *Aphytis*, *Aspidiotus neri* 7542
host searching behavior, oviposition, *Paracryphonoxys africanus* 9132
host selection, *Rhodnius pallens*, Mammalia, Panama 667
host specificity, oviposition, *Brochymena*, *Trichopoda plumipes*, USA, Texas 2024
host-parasite interactions, Aphididae 1221
host-parasite interactions, resistance, *Amblyomma americanum*, *Cavia* 1232
host-searching behavior, kairomones, *Chelonus curticulatus* 5944
hosts biological control, disease transmission vectors, *Mermithidae*, *Culicidae* 3661
hosts biological control, Nematoda, *Insecta* 3614
hosts diapause effects on, *Lydella thompsoni*, *Archana geminipuncta* 1857
hosts effects on development, *Muscifurax raptor*, *Spalangia drosophilae*, *Diptera* 2116
hosts, Encyrtidae, *Antonia graminis*, South Africa 2029
hosts growth, juvenile hormones effects on, *Gonia cinerascens*, *Galleria mellonella* 6764
hosts immune response, *Dirofilaria immitis*, *Aedes trivittatus* 1031
hosts immune response (humoral), *Hymenolepis diminuta*, *Periplaneta americana*, *Schistocerca gregaria* 1010
hosts, *Lyta sayi*, *Agapostemon virens* 6759
hosts, *Mallophaga*, *Numenius americanus*, USA, New Mexico 3581
hosts, *Physocleptus sexalatus*, *Ascarops strongylina*, *Gongylonema pulchrum*, *Onthophagus gazella*, USA, Georgia, USA, Texas 9203
hosts, range, reviews, *Leptinus*, North America 9498
hosts taxonomy indicators, *Myobidae*, *Chiroptera* 5950
hyperparasitism, host preferences, development, *Microterys flavus*, *Cheiloneris paralia* 5185
hyperparasitism, host preferences, oviposition, development, *Microterys flavus*, *Pachyneuron concolor* 5177
hyperparasitism, host preferences, oviposition, development, *Microterys flavus*, *Marietta javensis* 5184
hypersensitivity antigens, skin tests, *Canis familiaris*, *Siphonaptera* 8406
Hysopus thymus, *Phrynosfrontina*, hosts, *Pinus banksiana*, new records, USA, Maine 2057
incidence, *Antidorsas marsupialis*, *Arthropoda*, South Africa 9146

Parasites, (continued)

- incidence, *Phthomama operculella*, Australia, Queensland 2828
infection, *Amoeba*, *Helicospiridium parastium*, *Oribatei* 5756
infection, *Babesia bigemina*, *Boophilus microplus* 8983
infection, developmental stages, susceptibility, *Romanomermis culicivorax*, *Culex pipiens* 1438
infection, *Dorysthenes paradoxus*, *Macracanthorhynchus hirudinaceus*, China, People's Rep., Liaoning Province 5289
infection, effects on longevity, *Plasmodium cynomolgi*, *Anopheles dirus* 5749
infection, gastrointestinal tract pathology, *Trypanosoma brucei rhodesiense*, *Glossina morsitans* 1020
infection, medical importance, *Ceratophyllus fasciatus*, *Rattus rattus* 2933
infection, new species, *Nosoma hylobii*, *Hylobius abietis* 8131
infection, new species, *Tetrahymena rotunda*, *Simulium*, USA, New York 1014
infection, overwintering larvae, *Laspeyresia pomonella* 9004
infection, pathology, *Matirolella crustosa*, *Nasutitermes*, Panama 4199
infection, *Phlebotomus syleptae*, *Sylepta ruralis* 998
infection, quantitation, population characteristics, *Nosoma apis*, *Apis mellifera* 1024
infection, reproduction, *Babesia ovis*, *Rhipicephalus bursa* 4184
infection, rural environments, *Trypanosoma*, *Glossina pallidipes*, Kenya 1318
infection, *Saissetia hemisphaerica*, Cuba 9010
infection, seasonal variations, *Hexameris*, *Lymantia dispar*, Japan 5753
infection, *Smittium morbosum*, *Anopheles hillii* 1008
infection susceptibility, inheritance, *Brugia pahangi*, *Wuchereria bancrofti*, *Aedes* 8146
infection, *Tetrahymena*, *Chironomidae*, America, Great Lakes 3608
infectivity, development, *Gastromermis*, *Aedes aegypti*, *Culex pipiens fatigans*, *Anopheles stephensi* 5740
infectivity, evolution, *Hymenolepis citelli*, *Tribolium confusum* 8998
infectivity, genetic factors, *Trypanosoma brucei*, *Glossina morsitans* 4185
infectivity, salinity effects, *Nematoda*, *Culicidae* 266
infection, *Acani*, infestation, *Trichosurus caninus*, Australia, New South Wales 6776
infestation, apiculture, geographical distribution, *Varroa jacobsoni*, *Apis mellifera* 2816
infestation, *Arrenurus*, *Zygopora* 4381
infestation, *Arthropoda*, *Peromyscus maniculatus* 2831
infestation, biological control, *Nematoda*, *Cephalicia lariciphila* 2959
infestation, colonial characteristics, apiculture, *Varroa jacobsoni*, *Apis mellifera* 5183
infestation, colonies, *Varroa jacobsoni*, *Apis mellifera*, Brazil 4456
infestation, control programs, *Varroa jacobsoni*, *Apis mellifera* 2971
infestation, effects on sexual behavior, longevity, *Macroleptus muscadomesticae*, *Dermatobia hominis* 5086
infestation, erythema skin lesions, rabbits, guinea-pigs, *Ixodes dammini* 8428
infestation, *Hexameris glossinae*, *Glossina* 9213
infestation, juveniles, *Pelecanus erythrorhynchos*, *Piagetiella peralis* 9148
infestation, *Mallophaga*, *Vanellus vanellus*, *Tringa totanus* 9143
infestation, man, larvae, *Amblyomma americanum* 8431
infestation, migratory species, *Aves*, *Ixodes ricinus*, *Ixodes arboricola* 7549
infestation, mortality, *Ovis*, *Ctenocephalides* *canis* 7631
infestation, pest outbreaks, orchards, *Pseudococcus maritimus*, *Pyrus communis*, USA, Washington 8498
infestation, *Pyemotes tritici*, *Aracrus fasciculatus*, USA, Florida 5188
infestation, rabbits, *Psoroptes cuticularis*, *Psoroptes* *ovis* 2179
infestation, *Rhinocylus conicus*, USA, Virginia 5937
infestation, seasonal variations, *Diaeris rapae*, *Lipaphis erysimi*, India, Madhya Pradesh 6767
infestation, seasonal variations, *Ixodes trianguliceps*, Mammalia, Germany, Fed. Rep. 7547
infestation, species composition, *Chalcidoidea*, *Sphaerolecanium prunastri* 9138
infestation, wildlife, *Urocyon cinereoargenteus*, *Sarcoptes scabiei*, USA, Pennsylvania 5193
Insecta hosts, *Nematoda* 3956
insecticides, effects on, *Hylemya brassicae*, *Bembidion lampros*, *Aleochara bilineata*, *Brassica oleracea* *botrytis* 717
intersexes, *Uromys cognatus*, Germany, Fed. Rep., Bavaria, Murnauer Moos 4730
interspecific relationships, associations, *Phenacoccus manihoti*, Congo 1222
interspecific relationships, competition, *Chrysomelidae*, *Heliconia*, Costa Rica 4370
introduced species, dispersal, *Aphidius cadyi*, effects on, *Acyrtosiphon pisum*, New Zealand, *Helensville* 506
larvae, *Genistelloides hibernalis*, *Allopaema vivipara* 2624
larvae mortality, *Synanthedon salmaceus*, New Zealand 4415
Leiopteron uniformis, rearing, instars, biology, hosts, *Lygus hesperus* 2022
life cycle, infection, malpighian tubules, *Gregarina hylobii*, *Ophryocystis hylobii*, *Hylobius abietis* 5726
life cycle, infection, *Plasmodium falciparum*, *Anopheles balabacensis* 8151
life cycle, life span, temperature effects, *Telenomus euproctidis*, China, People's Rep., Hunan Province 2792
life cycle, *Pleistophora schubergi* *neustriiae*, *Malacosoma neustrii* 8124
life cycle, reproductive behavior, *Goniozus emigratus*, *Paramyelois transitella* 6754
life cycle, *Rhipicephalus haemaphysaloides* *haemaphysaloides* 5947
life history, biology, reviews, *Cuterebridae* 5912
life history, *Dendrocerus*, *Aphidius* 4382
life history, man, *Sarcoptes scabiei* 666
life history, morphology, *Tetractinospira victoris*, *Ceriatrigon coromandelianum* 2630
life history, reproduction, *Aleochara moesta*, *Musca domestica* 6775
life history, *Retractoccephalus*, *Insecta* 7383
life tables, oviposition, competition, comparison, *Trichogramma brevicapillum*, *Trichogramma pretiosum* 7424
livestock, surveys, Ixodoidea, Yemen, Arab Rep. 6067
longevity, fecundity, hosts population density effects on, *Aphelinus semiflavus*, *Acyrtosiphon pisum* 8318
Macrosiphum rosae-formosa population dynamics, ornamental plants, *Macrosiphum rosae*, *Macrosiphum rosaeformis* 4530
man, identification methodology, *Insecta*, *Arachnida* 8423
mass rearing, host preferences, effects on development, *Bracon brevicornis* 509
mass rearing, larvae development, fecundity, *Pales pavidus*, *Galleria mellonella* 510
mass rearing methodology, biological control, *Filipjevimeris leipandra*, *Diatroba baletata* 8494
Megalyptis opercularis hosts, *Langue retentor*, *Carcelia lagoae* 2027

Parasites, (continued)

- migration, hosts tissues, *Cuterebra fontinella*, *Peromyscus leucopus* 2832
migrations, environmental conditions, *Frontopylella frontalis*, *Oenanthia isabellina* 9147
morphology, *Beivosa bicincta*, *Pachylia syces* 6755
morphology, biometrics, *Alectoria rufa*, *Cuculogaster heterographus* 8050
morphology, biometrics, *Alectoria rufa*, *Goniodes dispar*, Spain, Granada 8051
morphology, *Capra hircus*, *Bovicola caprae* 8335
morphology, *Carduelis carduelis*, *Brueelia densilimba* 8048
morphology, *Carduelis carduelis*, *Menacanthus carduelis* 8049
morphology, *Cheyletiella*, *Cheyletiellidae*, *Mammalia* 92
morphology, developmental stages, *Phronimus mitratus* 864
morphology, feeding apparatus, *Arrenurus* 84
morphology, identification keys, *Haemaphysalis cooley*, South Africa 3259
morphology, keys, 10 species, *Brueelia*, Spain 8047
morphology, *Menacanthus alaudae*, *Galenda cristata* 9145
morphology, *Menacanthus alaudae*, *Galenda cristata* 9145
morphology, *Mysidia rustica*, *Philoferus*, Spain 8046
morphology, new species, *Gonizox mandibulatus*, *Gonizox jacintae*, *Epiphyas postvittana*, Australia 833
morphology, nymphs, adults, *Anas platyrhynchos*, *Freyana anatina anatina* 8030
morphology, nymphs, larvae, adults, *Tyborinus* 81
morphology, *Ricinus rubecula*, *Eritrichus rubecula*, Spain 4103
morphology, *Tachinidae*, *Schistogaster decussatus* 8189
mortality, crop fields, *Anthonomus grandis grandis*, *Gossypium*, USA, Texas 6125
mortality, population decline, *Saissetia oleae* 3620
mortality, predation effects on, *Blaesoxipha*, *Melanoplus sanguinipes* 6027
mortality, reproduction, *Babesia bigemina*, *Boophilus decoloratus* 6025
mouth parts, ultrastructure, *Arrenurus* 2505
nasal infection, *Cephenemyia*, *Odocoileus hemionus* 518
natural enemies, biological control, *Pseudococcus comstocki*, USA, California 3018
natural enemies, *Fulgoroidea* 9137
natural enemies, *Hymenoptera*, *Scolytidae*, Israel 4372
natural enemies, *Neochetina bruchi*, *Neochetina eichhorniae*, Argentina 8379
natural enemies, pests, *Chaenusa*, *Hydrellia philippina*, India 7673
natural enemies, pests, *Myzus persicae*, *Spodoptera litura*, India 6926
natural enemies, seasonal variations, *Pseudaulacaspis pentagona*, Japan 2141
new records, *Allantonomatidae*, *Polygenis tripus*, South America 291
new records, *Chalcidoidea*, *Proctotrupidae*, Poland 9467
new records, disease transmission, sheep, *Babesia motasi*, *Haemaphysalis punctata*, British Isles 4538
new records, eggs, *Scutellista cyanea*, *Parasaissetia nigra*, India, Maharashtra 7540
new records, *Elasmopalpus lignosellus*, USA, Texas 3577
new records, geographical distribution, *Dendrosoter protuberans*, USA, California 7121
new records, geographical distribution, *Synaldis nathopsis*, Brazil 6334
new records, geographical distribution, *Vaevae culicis*, *Ascoegarna*, *Aedes polyneisensis*, *Tokeleau* 51 9196
new records, *Heliothrips haemorrhoidalis*, *Goetheana parvipennis*, Bahama Is. 4744
new records, infection, *Gastromermis*, *Aedes aegypti*, *Culex pipiens fatigans*, *Anopheles stephensi* 4209
new records, *Malacoptila striata*, *Picicola striata* 4899
new records, new species, *Miniopterus*, *Calcaryomyia*, *Pteracarus miniopteri*, Africa 4766
new records, range extension, check lists, *Siphonaptera*, *Mammalia*, USA, Alaska 5530
new records, *Spinturnix globosus*, *Myotis lucifugus*, Canada, Alberta 5192
new records, *Thelatanomidae*, *Arthropoda*, India, North 8390
new records, *Tydeidae*, Australia 1589
new records, *Vannellus vannellus*, *Actinophthorus gracilis*, *Quadraceps juncus*, *Saemundsonia temporalis*, Spain 8334
new species, *Acanthophthirus capaci*, *Myotis capaci*, Turkey 5545
new species, *Actinophthirus ellipsoides*, *Ischnura delicata* 2627
new species, *Androlaelaps capronyi*, *Ornithonyssus garndoi*, *Capyromyidae*, Cuba 8720
new species, *Ascoschoengastia danieli*, USSR, Russia 7146
new species, *Bakerdiana kielczewskii*, *Petalomum raclei*, *Impanes parapicosimilis*, *Scutacarus myrmecophilus*, *Scutacarus ovoideosimilis*, Poland 4761
new species, *Cephaletia hayati*, India 2462
new species, *Cryptoxylus lymanoti*, *Lymanotus decipiens* 2451
new species, *Eadia neurichius*, *Neurochius globus* 796
new species, *Encarsia minot*, *Encarsia abatei*, *Eretmocerus cadabae*, Africa 4881
new species, *Felis domesticus*, *Demodex* 7140
new species, host plants, *Eurytoma* 4878
new species, hosts, *Trombiculacidae* *kirchophales*, *Pitohui kirchophalus*, New Guinea 3684
new species, infestation, *Metaparasitlenchus guadeloupensis*, *Hexacolus guayanaensis* 6613
new species, isolation, *Ramphocallus olivaceus*, *Cenagion olivaceum* 2628
new species, morphology, *Aphelinus prociphili*, *Prociophilus fraxinifolii*, USA, Iowa 39
new species, morphology, *Pseudaphycus debachi*, *Ferrisia virgata*, Mexico 2446
new species, morphology, taxonomy, *Invidia*, USA, Texas 3221
new species, new genera, *Nasaliopsis bonensis* 11
new species, *Nosema calcarati*, *Pityogenes calcaratus* 9002
new species, taxonomy, *Lepidophora tryoxylon* 2414
new species, taxonomy, morphology, *Afrotrombicula gabonica*, *Afrotrombicula vaubrei*, *Atherurus africanus*, Gabon 798
new species, taxonomy, morphology, *Cephaletia hayati*, India 4872
new species, taxonomy, morphology, *Trombicastia novaebrantiae*, Papua New Guinea, New Britain 4762
new species, *Tegolophis spondialis*, *Tegolophis vitexii*, India, West Bengal 3969
new species, *Termitaria*, Australia, Australia 9005
new species, *Trombiculidae*, *Rousettus amplexicaudatus*, *Rallus torquatus*, Philippines 794
new species, *Tropilaelaps kuenigera*, *Anis dorsata*, Sri Lanka 3973
new species, *Walchia tangungshanensis*, China, People's Rep. 7
new species, *Whartonia kulumbodensis*, *Dobsonia pannicincta*, *Dobsonia moluccensis*, Papua New Guinea, Irian Jaya 797
occurrence, apiculture hives, Canada, Saskatchewan 4603
occurrence, bees, *Aeroglyphus robustus*, *Apis mellifera* 2026
occurrence, biological control, *Lydella thompsoni*, *Ostrinia nubilalis*, USA, Delaware 2053

Parasites, (continued)

- occurrence, *Varroa jacobsoni*, USA, Maryland 3760
olaction, hosts odors, *Hymenoptera*, *Dendroctonus frontalis* 4912
overwintering, *Anthophila fabriciana*, British Isles, England 5153
oviposition, artificial substrates, *Gonia cinerascens* 2823
oviposition, colonies, *Puthyria vestalis*, *Bombus terrestris* 4376
oviposition, *Dendrosoter protuberans*, *Scolytus multistriatus* 2017
oviposition deterrents, hosts plants, *Hylemya* 528
oviposition, host searching behavior, *Poecilostichus cothurnatus*, *Bupalus piniarius* 2020
oviposition, host specificity, *Dryinidae*, *Diechoptera bialynata*, *Eurybrachys concolor* 401
oviposition, hosts kairomones effects on, *Nemeritis canescens*, *Ephestia kuehniella* 4384
oviposition, hosts kairomones effects on, *Tetrastichus schoenobii*, *Tryporyza incertalis* 1218
pathogens, interaction, pest control, models 1455
pathogens, *Neoplectana carpocapsae*, *Hypoosoter exiguae* 1804
pathology, larvae *Burellia dimorpha* *Solenopsis geminata* 279
pathology, morphology, salivary gland, *Babesia microti*, *Ixodes ricinus* 1005
Pentatomistax nacleae, hosts, *Parotis vertumalis*, new records, India, Kerala 2041
pest control, biological control, agricultural practices, *Diatraea saccharalis*, Barbados 2951
pest control, biological control, *Ceroplastes cingipediiformis*, USA, Texas 6116
pest control, biological control, *metaphysa*, *Trichogramma*, *Heliothis* 1448
pest control, biological control, *Trioxys complanatus*, *Therioaphis trifolii*, Australia, South Australia 3821
pest control, *Chrysomomyia*, *Linomyza sativae*, *Linomyza trifolii*, USA, Texas 4460
pest control, *Encarsia formosa*, *Traleurodes vaporariorum* 7726
pest control, environment conditions, *Brachionibacter*, *Ephestia caulella* 2025
pest control, *Neoschizothrips damalis* ovis *Linognathus pedalis*, *Linognathus ovillus*, Australia 3746
pest control, plantations, *Lophophora diatraea*, *Diatraea saccharalis*, USA, Louisiana 345
pest control, population dynamics, *Spalangia endius*, *Musca domestica* 6903
pest control, *Propylaea detrita*, *Quadrastipulus pectinicornis*, Greece 2956
pest outbreaks, biological control, *Neoplectana carpocapsae*, *Phronoxystus robitiae* 733
pest resistance, *dim-sensitization* antibodies, *Sylvilagus floridanus*, *Haemaphysalis leponisultrius*, *Dermaconter variabilis* 5726
pests, apiculture, reviews, *Varroa jacobsoni*, *Acaraps woodi*, *Tropilaelaps clareae* 5945
pests, natural enemies, *Malacosoma indica*, India 6768
pests, surveys *Spodoptera littoralis* *Expepenti* 6975
photaxis, host specificity, *Anisota imbecilis* 8191
Polistes exulans, *Chalcidia iphitalis*, *Elaenius polistes*, mortality, population dynamics 2155
population density, oviposition, host selection, competition 2028
population dynamics, horizontal distribution, soil, *Steinernema kraussei*, *Cephalix abietis* 9173
population dynamics, hosts population density effects on, *Gonia cinerascens*, *Gallina mellonella* 6773
population dynamics, *Ixodidae*, *Macroctes canaliculatus* 6777
population dynamics, pests, biological control, chemical control, *Earias*, *Pectinophora gossypiella* 1444
population dynamics, *Pseudococcus longispinus*, New Zealand 459
population establishment, survival, biological control, *Romanomerus culicivorus*, *Aedes polyneisensis*, *Tokeleau* 51 7630
population growth, *Brachionibacter* 1227
population growth, seasonal variations, *Phoropotes ovis*, USA, Texas 517
population regulation, *Lysiphlebus testaceipes*, *Aphis nerii*, USA, California 1276
population regulation, population dynamics, *Cydia pythorax* 8381
population status, *Ostrinia nubilalis*, *Eriborus terrebrans*, *Macroctes grandis*, *Aploma caesar*, *Lophophora*, USA, Connecticut 8399
population structure, infestation distribution, *Ectenesa mesiae*, *Megaderma spasma* 4387
population studies, sampling methodology, *Ooencyrtus kuvanae* 2821
population studies, seasonal variations, parasitism, *Amblyomma americanum* 3586
postparasites, *Anopheles freeborni*, *Culex tarsalis*, hosts, *Romanomerus culicivorus*, control, larvae 2168
predators, *Aphididae*, India 4416
predators, host preferences, *Heliothis*, Colombia 555
predators, life history, *Seymouria lividigaster*, *Lepidoptera galbula*, Australia 2874
Protomyobia indianensis, taxonomy, new species, morphology, hosts, *Sorex longirostris*, USA, Indiana 1591
Pseudoschoengastia disparungus, taxonomy, new species, morphology, hosts, *Heteromys desmanus*, *Boninus* 1590
public health, *Acan. Mallophaga* 9263
pupae, susceptibility, *Neoplectana carpocapsae*, *Galleria mellonella*, *Bombyx mori* 3406
radioactive labelling, *Theliana parva*, *Rhipicephalus appendiculatus* 3415
range extension, *Anopura*, *Acan. Rodentia*, Canada, Quebec 4386
rearing, (media culture), *Bovicola caprae* 8337
rearing methodology, *Bonnetia compta* 6478
rearing methodology, *Brachymeria lasus*, *Scylotus* 1701
reproduction, *Eutromphodopsis nitens*, *Nezara viridula* 6770
reproduction, survival, *Stomoxys calcitrans*, *Spalangia cameroni* 9141
reproductive behavior, oviposition, population dynamics, *Euplectrus plathyneae* 1149
reviews, taxonomy, morphology, *Thomomys*, *Geomydoecus californicus* 85
salivary gland, spirogony, ultrastructure, *Theliana parva*, *Rhipicephalus appendiculatus* 9007
sampling methods, pupae, *Musca domestica*, *Stomoxys calcitrans*, *Hymenoptera* 8857
Sasacarus inca, taxonomy, new species, morphology, Peru 1587
seasonal variations, population dynamics, distribution, new records, *Brachionidae*, *Czechoslovakia*, *Vah R.* 573
seasonal variations, species composition, *Leporidae*, *Ixodidae*, *Siphonaptera*, Spain, Ciudad Real 8333
sexual reproduction, development, *Trichogramma brevicapillum* 7422
sexual reproduction, vectors, *Trypanosoma brucei*, *Glossina morsitans morsitans* 2631
Siphonaptera, hosts, *Martes americana*, *Sorex cinereus*, *Eutamias minimus*,

Parasites, (continued)

- Clethrionomys rutilus*, *Microtus pennsylvanicus*, *Microtus longicaudus*, *Lemmus sibiricus*, *Synaptomys borealis* 2037
site preferences, domestic animals, *Ixodes scapularis* 6890
spatial distribution, Hymenoptera, *Choristoneura occidentalis* 2812
species composition, Arthropoda, *Rattus norvegicus norvegicus*, USSR, Kazakhstan 9144
species composition, Chiroptera, Nycteribidae, Czechoslovakia 7903
species composition, Coccidea, host plants, *Lygomyza*, Africa 5206
species composition, Mammalia, *Canis aureus*, Iran 7109
species composition, new records, Insecta, Acarina, Chiroptera, USA, Michigan 7550
species composition, Phoenicopteridae, Spain 8336
species composition, *Sorex cinereus*, *Sorex longirostris*, *Oryzoxenus sonoris*, Myxodidae 9149
spores disintegration, *Nosema apis*, *Apis mellifera* 6610
sporozoites development, *Babesia ovis*, *Rhipicephalus bursa* 5024
surveys, *Chaetophylla tuberculatus*, Mammalia, USA, Alaska 4743
surveys, *Heterodoxus*, *Petrogale*, Australia 2921
surveys, *Mutellidae*, *Siphonaptera*, Switzerland 5194
surveys, *Obtusiclava oryzae*, China, People's Rep 1013
surveys, *Phthiraptera*, *Haematopodidae* 516
surveys, *Sylepta derogata*, Nigeria, Ibadan 5938
susceptibility, malaria transmission, *Culex*, USA, Florida 1320
Symptetrachia capsica, life history, Agathis, Apanteles, Bracon, Apsilophrys capicium, *Pensicola* 6720
taxonomic revision, marine organisms, *Iguanacarus* 9
taxonomy, Mallophaga, *Melanitta nigra*, *Melanitta deglandi*, *Melanitta perscullata* 2833
taxonomy, *Mitonyssus*, Chiroptera, *Mutillidae*, *Neotoma* 10
taxonomy, morphology, *Brachyotocoris puncticeps* 32
taxonomy, synonymy, *Trichomalus* 5592
Telonimus californicus, mating, reproduction, oviposition, hosts, *Orygia pseudosagitta* 2015
temperature effects on development, *Encarsia formosa*, *Trialeurodes vaporariorum* 5823
temperature effects on development, *Gonia cinerascens*, *Galleria mellonella* 6772
temperature, relative humidity, effects on survival, fecundity, *Pauridia peregrina* 7504
temperature requirements, development, *Microctonus aethiops* 391
toxicity, insecticides, *Apanteles ormyx* 2655
toxicity, insecticides, *Copidosoma koehleri* 7411
toxicity, pesticides, *Coleophora laricella* 5782
transmission, *Babesia lotori*, *Procyon lotor*, *Ixodes texans*, USA, Connecticut 1004
transmission, *Onchocerca tarsicola*, Diptera 662
transmission, vectors, *Mansonella ozzardi*, *Culicoides variipennis* 3399
transport methodology, *Romanospora culicivora*, *Culicidae* 4078
Tyrannus tyrannus, *Tyrannus verticalis*, new records, Mallophaga, Acarina, Hippoboscidae, Canada, Manitoba, Delta Marsh 514
vectors, *Mansonella ozzardi*, *Culicoides furens*, Haiti 656
vectors, medical importance, *Armigeres subulatus*, Malaysia 6057
vectors, pathogens, *Macroleishmania*, *Anopheles*, *Hylobius pales* 4207
venom, effects on hosts development, Hymenoptera 502
weed control, *Cordia curassavica*, *Metrogalea obscura*, *Eurytoma attiva*, Malaysia 2960
Xyleborus formatus, new records, hosts, *Acacia decurrens*, India, Nilgiris 2088

Parasitism,

- adaptiveness, copulation time, *Trichopoda pennipes*, *Nezara viridula* 1898
animal variations, orchards, *Phylloxera cactae*, USA, Connecticut 5943
Apanteles glomeratus, effects on *Beauveria bassiana* pathogenicity, cuticle, *Pieris brassicae* 8132
Azadirachtia indica, effects on parasitism, *Telenomus remus*, *Spodoptera litura* 6214
biological control, *Pediobius foveolatus*, *Epilachna varivestis* 2032
biological control, pests, *Heterorhabdus heliothidis*, *Otiorynchus sulcatus* 2188
Cameraria, population regulation, host plants, *Crotalaria* 2134
community composition, interspecific relationships, *Iridomyrmex humilis*, *Panococcus citri*, *Saussetia oleae*, France 3612
Danaus plexippus, food plants, *Sturmia convergens*, seasonal variations, size 2068
drought effects on, *Coniferales*, Insecta, USA, California 4394
effects on body weight, *Gonia cinerascens*, *Galleria mellonella* 6765
effects on hemolymph amino acids, *Campoplex chlorella*, *Heliothis armigera* 1022
effects on hosts development, *Manitapha uhleri*, *Lycaea rabida* 4369
effects on hosts survival, *Bonnetia comata*, *Agrotis ipsilon* 6753
effects on larvae body weight, *Gonia cinerascens*, *Galleria mellonella* 6766
effects on longevity, hosts, *Bursaphelenchus lignicolus*, *Monochamus alternatus* 7623
effects on reproduction, longevity, *Trichopoda pennipes*, *Nezara viridula* 5936
effects on reproduction, *Nosematidae*, *Chilo sacchariphagus* 9009
effects on wildlife, *Ixodidae*, *Ungulicula*, Zimbabwe 633
eggs, *Telenomus aradi*, *Aradus cinamomeus*, Finland 5934
Elasmopalpus lignosellus, *Orygia elasmopalpi*, *Apanteles*, *Pristomerus spinator*, *Invidia deceptor*, USA, Texas 3577
environmental factors, *Trichopoda*, *Nezara viridula* 7422
estimation methodology, *Trichopoda pennipes*, *Nezara viridula* 2030
Gracillariidae, Hymenoptera, survival, isolation, plant hosts, *Quercus* 2135
host-parasite interactions, ecological distribution, altitude, *Coleophora alticola*, *Gonotypus melanostoma*, *Scambus brevicornis*, *Tetrastichus endemus* 4371
host-parasite interactions, larviposition, chemical stimuli, *Lixophaga diatraeae*, *Diatraea saccharalis* 5941
hosts body weight, *Galleria mellonella*, *Gonia cinerascens* 2827
hosts, *Parasitaphelenchus*, *Ips sexdentatus* 6879
infection, association, *Nosema pyrausta*, *Macrocentrus grandii*, *Ostrinia nubilalis* 6039
infestation, community composition, age, effects, *Pinus taeda*, *Rhyacionia frustana* 1229
infestation, crop fields, *Agromyzidae*, *Medicago sativa*, Europe 8586
infestation, *Eutrichopodopsis nitens*, *Nezara viridula*, Brazil 6758
inflammation, *Bos taurus*, *Boophilus microplus*, 2912
intensity, host-parasite interactions, *Villa brunnea* 2035
juvenile hormones, hosts growth, *Galleria mellonella*, *Gonia cinerascens* 2826
Laboulbeniales, Carabidae, new records 5990

Parasitism, (continued)

- larvae, *Cerambycidae*, *Ycaopla evansi*, South Africa 5178
mortality, temperature effects, *Galleria mellonella* 1814
new records, *Canis familiaris*, *Sarcophaga scabiei* var *homins* 7638
new records, eggs, *Psychoneura*, *Rhopalum clavipes*, Canada, Ontario 4377
new records, *Heterorhabdus*, *Graphognathus leucoloma*, Australia 2902
new records, *Hyalomyces triangulifer*, *Glischtrichus fascianus* 6760
new records, *Trichoboscopia epeori*, *Rhithoneura iridina* 5232
Opus, *Pteromalus*, *Symptesis*, *Hydrellia valida*, USA, Florida, Oyster Bay 3621
oviposition, *Epimophilus insularis*, *Clubiona cambridgei*, *Salicis* 6756
oviposition, host specificity, *Brochymena*, *Trichopoda pennipes*, USA, Texas 2044
pathology, *Heterorhabdus bacteriophora*, *Culex pipiens* 4202
pathology, *Heterorhabdus bacteriophora*, *Culex pipiens* 5728
pathology, morphology, pseudogynes, *Formica fusca* 8164
plant extracts, effects on biological control, *Heliothis zea*, *Trichogramma* 5382
population ecology, mortality, Hymenoptera, *Ladoga camilla*, British Isles, England 6009
pupae, hosts body weight, *Galleria mellonella*, *Gonia cinerascens* 2822
pupae, *Rhagoletis pomonella*, USA, Connecticut 2819
pupae susceptibility, *Neoplectana carpocapsae*, *Lepidoptera* 287
Rhipicephalus furcatus, *Tabanus leleai* 9133
seasonal variations, sex differences, *Amblyomus americanus* 3586
seasonal variations, sex differences, larvae, *Thyridopteryx epimeraeformis* 4444
sensilla, tarsi, *Nematoda*, *Chronomus* 6535
sex ratio, hosts, *Heleodermis vivipara*, *Cuicoides variipennis* 6024
spatial distribution, Hymenoptera, *Choristoneura occidentalis* 2812
stylopization, hosts, *Stylops crawfordi*, *Andrena*, USA, Texas 6763
susceptibility, vitamin deficiencies effects on, *Polyplax spinulosa*, *Rattus rattus* 6779
Tachinidae, *Pentatomidae*, USA, Texas, USA, South Carolina 2019
- Parasitoids,**
aggregation behavior, *Apomyiopsis xylota*, USA, New York 5143
association, competition, *Physicimia frustana* 9140
autecology, methodology, weight, galls, *Dryocossus kuriphus* 7576
biological control, pest control, reviews, Insecta 7665
biological control, pests, *Torymus*, *Dryocossus kuriphus*, Japan 4545
bionomics, life history, *Euplectrus kuwanae*, *Argyrogramma albostriata* 1223
body size sex differences, *Trichogramma minutum* 8323
community composition, effects on hosts extinction, *Xanthotarsus politum*, USA, New Jersey 2034
competition, *Lepidoptera* hosts, Diptera, Hymenoptera 1224
competition, *Lepidoptera* hosts, Hymenoptera, Diptera 1225
competition, population density effects on host searching behavior, *Venturia canescens* 3652
control programs, biological control, *Trichogramma* 1421
crop fields, *Heliothis zea*, *Heliothis virescens*, USA, Mississippi 6168
development, hosts physiology effects on, *Bioesther longicaudatus*, *Anastrepha suspensa* 9135
developmental stages, salt marshes, *Prokelisia marginata*, USA, Florida, Oyster Bay 4368
diapause adaptations, geographical variations, *Leptophlana boudardi*, *Drosophila melanogaster* 6637
ecological distribution, abundance, grasslands, *Aphidius*, British Isles 8393
effects on colonial characteristics, survival adaptations, *Polistes exclamans* 3045
effects on hosts abundance, *Trichopoda giacomelli*, *Nezara viridula* 2018
effects on hosts behavior, natural selection, survival 6752
effects on hosts development, *Apanteles smerhini*, *Manduca sexta* 8328
effects on larvae mortality, *Dacus oleae* 7607
eggs, *Clavigralla tomentosicollis*, Africa 2814
eggs, larvae, morphology, *Euphranta connexa*, *Scambus brevicornis* 8040
embryogenesis, developmental stages, *Mormoniella vitripennis* 5068
embryogenesis, temperature effects, host-parasite interactions, instars, *Ostrinia nubilalis*, *Macrocentrus grandii* 3489
emergence, juvenile hormones effects on, *Apanteles congregatus*, *Manduca sexta* 5935
emergence, survival, insecticides effects on, *Amitus hesperidum*, *Prospaltella opulenta* 2245
exploratory behavior, host selection, predator-prey interactions, *Anisopteromalus calandreae*, *Callosobruchus maculatus* 4367
feeding, *Epimophilus insularis*, *Clubiona cambridgei*, *Salicis* 6756
flight activity, diurnal variations, seasonal variations, *Encarsia formosa* 9116
habitat preferences, biological control, *Compilura concinnata*, *Lymantia dispar* 8331
host preferences, *Trichogramma chilonis*, *Trichogramma exiguum* 7544
host searching behavior, chemical stimuli, *Musca domestica*, *Muscidifurax raptor*, *Muscidifurax raptor*, *Spalangia cameroni*, *Spalangia endius* 8319
host searching behavior, eggs, *Trichogramma*, *Heliothis zea* 5940
host searching behavior, hosts defense mechanisms, *Apanteles eupyridis*, *Eupyridus phaeus* 5932
host searching behavior, olfactory stimuli, hosts, *Sitona hispidulus*, *Patasson lamei* 7537
host searching behavior optimization, *Drosophila melanogaster* 7539
host searching behavior, oviposition, *Amitus hesperidum*, *Encarsia opulenta*, *Aleurocanthus woglumi* 2830
host searching behavior, oviposition, fecundity, *Ascogaster reticulatus* 7482
host searching behavior, oviposition, kairomones, eggs, *Adoxophyes*, *Ascogaster reticulatus* 7485
host selection, eggs, *Heliothis virescens* 2815
host selection, kairomones, eggs, *Heliothis virescens*, *Trichogramma heliothidis* 5186
host-parasite interactions, cycles, population density, *Diatraea*, *Trichopoda cubensis*, *Parathesia claspipalpis*, Trinidad 5986
host-parasite interactions, ecological distribution, altitude, *Coleophora alticola*, *Gonotypus melanostoma*, *Scambus brevicornis*, *Tetrastichus endemus* 4371
host-parasite interactions, *Poecilostichus corthumnus*, *Bupalus pinarius*, Netherlands 5179
hosts age effects on development, *Coccynomimus turionellae* 8330
hosts age effects on eggs suitability, *Trichogramma*, *Sepedon fuscipennis* 8320
hosts diets, toxins, *Hypoaster exiguae*, *Heliothis zea* 3578
hosts eggs susceptibility, *Trichogramma minutum*, *Choristoneura fumiferana* 8329
hosts, *Exoristobia philippensis* 5933
hosts kairomones, effects on oviposition, *Cardiochiles nigripes*, *Heliothis virescens* 5176
hosts larvae, development, *Chelonus insularis*, *Heliothis virescens*, *Spodoptera*

- Parasitoids, (continued)**
orthogalli 4379
 hyperparasitism, *Diminocnema incongrua*, *Arachnophaga dureicorpus*, *Megalopyge opercularis* 8311
 infestation, effects on hosts reproductive organs, *Aphidius smithi*, *Acyrtosiphon pisum* 6774
 infestation, eggs mortality, *Malacosoma americanum* 8314
 interspecific relationships, competition, *Heliothis virescens* 2811
 introduced species, population decline, *Enbrosus terebrans*, *Lydella thompsoni*, *Macrocentrus grandii*, USA, Iowa 6008
 kaunomones, host plants effects on, *Microplitis croceipes*, *Heliothis zea* 2824
 keys, taxonomy, Aphididae 6769
 life cycle, *Dibrachys boariae*, *Galleria mellonella* 9131
 life cycle, *Ephedrus plagiator*, *Proclitus*, *Fraxinus excelsior* association 9142
 life cycle, feeding, *Parasitella*, *Pectinophora gossypiella* 6771
 life cycle, *Nilaparvata lugens*, *Sogatella furcifera* 9136
 life cycle, *Phasgonophora sulcata*, *Agrius bilineatus*, USA, Wisconsin 2016
 life cycle, population dynamics, *Andrena gideon*, *Anthrax analis* 8383
 longevity, fecundity, temperature effects, *Patasson lamerei* 2817
 new records, hosts, *Tachinaephagus zealandicus*, *Proctophila* 4378
 new species, taxonomy, Aphididae, India 7213
 new species, taxonomy, morphology, *Aulocis lodosi*, *Telenomus turcicus*, Turkey 7989
 new species, taxonomy, morphology, *Baryconus dudichi*, Philippines, *Baryconus sillego*, Costa Rica 7986
 new species, taxonomy, morphology, *Telenomus punctigaster*, *Telenomus homopterae*, *Ascolus turkandasi*, Turkey 7988
 nuclear polyhedrosis virus infection effects on, *Voria ruralis*, *Trichoplusia ni* 2036
 nutrition, nitrogen uptake, *Brachymeria intermedia*, *Coccygomimus tuniellae*, *Lymantria dispar* 8326
 Opus, *Pteromalus*, *Symptesis*, *Hydrellia valida*, USA, Florida, Oyster Bay 3621
 oviposition, host selection, fecundity, *Euplectrus kuwanae* 2742
 oviposition inhibition, symbiosis, *Sclerotium astens*, *Asteromyia carbonifera*, *Torymus* caste 8309
 parasitism, annual variations, orchards, *Phyllonorycter crataegella*, USA, Connecticut 5943
 pest control, biological control, *Brachymeria lasus*, *Coccygomimus disparis*, *Lymantria dispar*, USA, Connecticut 8466
 pest control, biological control, *Vespidae*, *Diptera* 9322
 pest control, urban environment, *Rhopalomyia californica*, USA, California 4572
 pest, *Neaphitis serripes*, *Brachymeria nassoi*, *Brachymeria nephandus*, India, Kerala 6761
 phonotaxis, song, parasitoids, *Gryllus integer*, *Gryllus veletis*, *Tegrolymus oceanicus* 7499
 population density effects on host-parasite interactions, *Insecta* 3575
Pseudanthonomus ham, USA, East 9097
 reproduction, fecundity, longevity, *Telenomus podisi*, *Trioxys euschisti* 8322
 reproduction, hosts, *Spalangia cameroni*, *Stenomys californicus* 5181
 reproductive effort, *Xanthopimpla sternalis*, *Chilo partellus* 8315
 seasonal variations, host preferences, *Noctuidae*, USA, Florida 4374
 sex determination, *Pimplinae* 7471
 sex ratio, reproductive strategy, hosts body size effects on, *Heterospiilis prusoidis* 7538
 sex ratio, siblings, mating, *Scelionidae* 3609
 species composition, Aphididae, *Aphelinidae*, Yemen, Arab Rep. 7902
 species composition, biological control, pest outbreaks, *Zeurapha daniana*, Switzerland 7546
 species composition, larvae, *Plutella maculipennis* 9139
 strains, interbreeding, *Apatelodes melanocoloris*, *Lymantria dispar* 8324
 superparasitism, life history, *Autographa californica* 8312
 surveys, Aphididae, India 7110
 surveys, *Ceratitis capitata*, *Anastrepha*, Costa Rica 2818
 surveys, pest control, *Spodoptera littoralis*, Cyprus 2810
 survival, effects on hosts behavior, adaptiveness, *Euphydryas phaeton* 1220
 survival, granulosis virus infection, *Pieris rapae* 4190
 systematics, phylogeny, *Euclyptus* 8712
 toxicity, metabolism, *Aonidia auranti* 9020
 venom, eggs encapsulation, hosts, *Pieris rapae crucivora*, *Apanteles glomeratus* 8325
- Parasitology**
 intraspecific relationships, fecundity, superparasitism, *Trichogrammatoidae* 1226
 life history, *Arcturus valencius*, Guatemala, *Laguna Chichoj* L. 503
- Parasitism**
 pests, new records, seeds, *Zea mays*, India, Punjab 7735
- Parasitism/modera**
 new genera, taxonomy, morphology, Africa 7939
- Parasitism/parasitoid**
 excretory glands, defense secretions, histology, physiology 1796
 reproductive organ, anatomy, histology, physiology 9033
- Parasitism/parasitoid**
 life history, New Zealand, *Wataikere* R. 451
- Parasitism/parasitoid**
 predation, predator-prey interactions, prey population density, cannibalism 3642
- Parasitism/parasitoid**
 feeding behavior, pollination, *Xiphidium caeruleum* 558
- Parasitism/parasitoid**
 population density, cycles, host-parasite interactions, *Diatraea*, Trinidad 5986
- Parasitism/parasitoid**
 bioaccumulation, toxicity, larvae, *Bombyx mori* 2663
 biodegradation, pesticide resistance, *Sancassania berlesii*, *Tetranychus urticae* 308
 insecticides, absorption, roots, crops 7747
 insecticides, pesticide residues, toxicity, effects on, *Apis mellifera*, cells, chemical analysis 298
- Parasitism/parasitoid**
 bioaccumulation, insecticides, chemical extraction, methodology, *Apis mellifera* 1060
 comparison, mortality, *Apis mellifera* 312
- Parasitism/parasitoid**
 colonial characteristics, castes, morphology 6996
- Parasitism/parasitoid**
 feeding experience, effects on orientation, nests 6695
- Parasitism/parasitoid**
 chemical analysis, venom, mass spectroscopy 248
- Parasitism/parasitoid**
 new species, taxonomy, morphology 8768
- Parasitism/parasitoid**
 taxonomic revision, morphology, Brazil 6373
- Parasitism/parasitoid**
 new species, taxonomy, morphology, Brazil 6373
- Parasitism/parasitoid**
 habitat, abundance, community composition 6845
- Parasitism/parasitoid**
 dispersal, habitat effects on 4427
 genetic variance, allozymes, population studies 3927
- Parasitism/parasitoid**
 genetic variance, allozymes, population studies 3927
- Parasitism/parasitoid**
 genetic variance, allozymes, population studies 3927
- Parasitism/parasitoid**
 genetic variance, allozymes, population studies 3927
- Parasitism/parasitoid**
 dispersal, habitat effects on 4427
- Parasitism/parasitoid**
 dispersal, habitat effects on 4427
- Parasitism/parasitoid**
 predatory behavior, food selection, prey 4349
- Parasitism/parasitoid**
 agonistic behavior, intraspecific relationships, females, *Spheg chneumonius* 9215
 brood care, adaptations, protection, environmental conditions 5108
 brood care, *Anastrepha adiabatus*, *Eudomyia foraminatus* 1913
 mating behavior, nesting behavior, *Eurytemus* 7484
 nesting behavior, mating behavior, reproductive strategy, *Pachodynerus nasidens* 6662
 oviposition, social hierarchy, dominance, *Parischogaster nigricans serrei* 5111
- Parasitism/parasitoid**
 geographical distribution, taxonomy, historical account, weed control, *Chromolaena odorata* 6079
- Parasitism/parasitoid**
 taxonomy, new genera, morphology, USA 4
- Parasitism/parasitoid**
 keys, morphology, Mediterranean Region 8782
- Parasitism/parasitoid**
 new species, taxonomy, morphology, Crete 8782
- Parasitism/parasitoid**
 larvae development, *Dufour's* gland secretions 3551
 nest building, colonies, structure 2278
- Parasitism/parasitoid**
 oviposition, parental behavior, social hierarchy, dominance 5111
- Parasitism/parasitoid**
 cold hardiness, acclimation, survival, *Antarctia*, Signy I. 6583
- Parasitism/parasitoid**
 feeding behavior, oogenesis, *Culicoides melleus*, *Culicoides bolensis* 2009
- Parasitism/parasitoid**
 new species, taxonomy, morphology 8768
- Parasitism/parasitoid**
 new species, taxonomy, morphology, Brazil 6364
- Parasitism/parasitoid**
 new species, taxonomy, morphology, Brazil, Rio de Janeiro 8779
- Parasitism/parasitoid**
 larvae survival, host plants chemical composition effects on 7567
- Parasitism/parasitoid**
 developmental stages, morphology 8871
- Parasitism/parasitoid**
 new species, taxonomy, morphology, Hungary, Budapest 8677
- Parasitism/parasitoid**
 developmental stages, morphology 8871
- Parasitism/parasitoid**
 hosts, parasites, *Pentatomastix nucleatae*, new records 2031
- Parasitism/parasitoid**
 ovary, aging methods, *Culex nigripalpus* 855
- Parasitism/parasitoid**
 synonymy, *Texocoris sechidis* 5581
- Parasitism/parasitoid**
 castes, reproduction, colonial characteristics, *Cataglyphis cursor* 7002
 development, *Baculum* 5810
 enzymes polymorphism, heterozygosity, *Drosophila mercatorum*, USA, Hawaii 3116
 hybrids, meiosis, *Warranaba virgo* 5460
 population studies, *Aphis nasturtii* 3557
 reproductive organs, anatomy, *Diadromus pulchellus* 3504
 sex determination, hormones effects on, *Solenopsis invicta* 1888
 survival, host plants, *Rhopalosiphum padi*, *Prunus patula* 2838
- Parasitism/parasitoid**
 life history, bionomics, population ecology, British Isles 5908
- Parasitism/parasitoid**
 life history, bionomics, population ecology, British Isles 5908
- Parasitism/parasitoid**
 filtration, food composition, *Solenopsis invicta* 1993
 mounds, comparative studies, *Macrotermes subhyalinus*, *Macrotermes michaelsoni* 747
- Parasitism/parasitoid**
 cell membranes, ions transport, enzymatic activity, *portosone*, *Manduca sexta* 3324
- Parasitism/parasitoid**
 predator-prey interactions, foraging behavior, *Insecta* 4421
- Parasitism/parasitoid**
 leg muscles, ultrastructure 119
 motor activity, muscles, electrical properties 113
 motor activity, muscles, electrical properties 120
- Parasitism/parasitoid**
 pest control, population regulation, *Insecta*, Turkey 619
- Parasitism/parasitoid**
 predation, coloration, mimicry, *Lycaeus equestris* 9214
- Parasitism/parasitoid**
 new species, taxonomy, morphology, Namibia 4843
- Parasitism/parasitoid**
 aggregation, life cycle, host plants, *Anguria warszewiczii*, Costa Rica 7553

- Psalmachius elongatus***, predators, pests biological control, *Hypera postica*, *Sitona hispidula* 612.
- Psaites***, geographic distribution, taxonomy, Japan 2445.
- Psaites esakii***, geographic distribution, taxonomy, Japan 2445.
- Psaspalum fluitans***, USA, Georgia, islands lakes, abundance, seasonal variations, *Crangonyx gracilis* 2293.
- Psaspalum notatum***, Pasture, damage, *Scaptiscus vicinus*, *Scaptiscus aetelus* 4573.
- Psasulus convexus***, ovarioles, morphology 7426.
- Passer domesticus***, hosts, parasites, *Boydella nigra*, USA, Hawaii 795.
- Passer montanus***, predation, effects on abundance, *Leucoma candida* 1292.
- Passerulus sandwichensis savanna***, predators, biological control, crop field, *Trichoplusia m* 2222.
- Passiflora mollissima***, weed control, natural enemies, *Heliconidae*, USA, Hawaii 2947.
- Pasture**, aggregation, environmental factors, *Acan. Collembola*, Brazil, Amazonia 4425 damage, *Psaspalum notatum*, *Scaptiscus vicinus*, *Scaptiscus aetelus* 4573 defoliation, yield, *Telegryllus commodus*, *Trifolium repens*, *Lolium perenne* 2254 defoliation, effects on population levels, *Costelytra zelandica* 545 dung, recycling, economic importance, introduced species, *Geotrupes*, USA 4654 field trials, biological control, *Bacillus thuringiensis israelensis*, Aedes, USA, Montana 6149 seeds loss, feeding, *Telegryllus commodus* 9303.
- Patusson lameerei***, longevity, fecundity, parasitoids, *Sitona hispidulus* 2817 survival, oviposition, temperature effects on 5082 temperature effects on oviposition, survival, larvae, pupae, adults 9055.
- Patusson lameerei***, parasitoids, host searching behavior, olfactory stimuli, hosts, *Sitona hispidulus* 7537.
- Pateleon silvatica***, traps, catches, oviposition 55.
- Paternal behavior**, brood care, eggs, males, *Belostoma micanulum*, Paraguay 1147.
- Pathogenesis**, bacteria diseases, immune response 7374 cytoplasmic polyhedrosis virus, infection, larvae, *Insecta* 7363 digestive tract, *Trypanosoma cruzi*, *Triatoma* 5022 diseases, books, *Insecta* 7920 entomopoxvirus infection, *Insecta* 7364, infection, developmental stages, *Nomuraea rileyi*, *Anticarsia gemmatilis* 5747, milky disease infection, *Insecta* 7373, virulence, fungi, *Insecta* 7368.
- Pathogenic bacteria**, biological control, onchoceridias vectors, *Bacillus thuringiensis*, *Simulium ochraceum*, Guatemala 626.
- Pathogenicity**, assays, standardization, *Bacillus thuringiensis*, *Culicidae* 8995 *Beauveria bassiana* infection, *Apanteles glomeratus* parasitism effects on, cuticle, *Pieris brassicae* 8132. *Beauveria tenella*, *Cerambycidae* 2636 bioassays, methodology, biological control, pests, *Beauveria bassiana*, *Trichoplusia ni* 4094, biological control, *Bacillus thuringiensis*, *Culicidae* 6602. *Chim yu*, isolation, *Ixodidae*, *Argasidae* 8985 crops, *Syncephalastrum racemosum*, *Penicillium oxalicum* 1815. digestive enzymes effects on, *Bacillus thuringiensis*, *Leucoma separata* 999. effects on food consumption, food conversion, *Nomuraea rileyi*, *Heliothis virescens* 9009. environmental effects, *Bacillus thuringiensis*, *Culex pipiens*, *Aedes aegypti* 8996. formulations, soil characteristics effects on, pest control, *Bacillus thuringiensis israelensis*, *Culicidae* 7671. gram-negative bacteria, *Galleria mellonella* 5724. granulosis virus, *Noctuidae* 5752. guinea-pigs, *Rickettsia*, experimental infection, *Ornithodoros moubata* 9234 immune response, hemolymph, *Bacillus cereus*, *Galleria mellonella* 5720 infection, effects on hosts fecundity, *Nosema carpocapsae*, *Cydia pomonella* 2632 infection, mortality, *Bacillus thuringiensis*, *Aedes aegypti* 3423 larvae, fungi, *Culicidae* 7367. larvae mortality, *Vairimorpha necatrix*, *Ostrinia nubilalis* 8168 larvae, *Tolypocladium cylindrosporum*, *Aedes australis* 4211. mortality, *Bacillus thuringiensis*, *Culex quinquefasciatus* 3422. mortality, biological control, *Metarhizium anisopliae*, *Nasutitermes exterosus* 8165. mortality, chronic stunt virus, *Amyelois transitella* 5759. nuclear polyhedrosis virus, cell lines, *Orygia leucostigma* 1026 nuclear polyhedrosis virus, pest control, *Lymantria dispar* 8145. *Paeclomyces farinosus*, *Insecta* 1001. pathogenic ingestion, *Metarhizium anisopliae*, *Beauveria bassiana*, *Gloecladium virens*, *Reticulitermes* 8150. pest control, *Bacillus thuringiensis*, *Culicidae* 8997 serotypes, susceptibility, *Bacillus thuringiensis*, *Galleria mellonella* 5733. susceptibility, *Bacillus thuringiensis*, *Achaea janata*, *Spodoptera litura* 7378 temperature effects, *Bacillus sphaericus*, *Culex fatigans*, *Anopheles subpictus* 2638. *Bacillus thuringiensis*, *Culicidae* 6599. toxicity, nuclear polyhedrosis virus, *Agrotis ipsilon* 3402. *Trypanosoma melophagium*, *Melophagus ovinus* 285. ultraviolet radiation effects on, *Bacillus thuringiensis*, *Spodoptera littoralis* 1011. varieties, *Bacillus thuringiensis*, *Culicidae* 2639. virulence, geographical variations, *Metarhizium anisopliae*, *Culex pipiens pipiens* 8161.
- Pathogens**, antigenic variants, continuous culture, *Trypanosoma brucei brucei*, *trypanosomiasis*, *Glossina morsitans* 8419. asexual reproduction, aquatic organisms hosts, *Entomophthora conica*, *Entomophthora rhizospora*, *Insecta* 1809. association, *Tilachidiopsis catenulata*, *Paltotyreus tarsatus*, Ivory Coast 6608.
- Pathogens, (continued)** babesiosis, vectors, livestock, *Hyalomma marginatum rufipes* 3693. *Bacillus thuringiensis*, biological control, pest control, *Leptinotarsa decemlineata* 1431. baculovirus, pest control, *Glycine max* crop fields, *Pseudoplusia includens* 6138. baculovirus, pest control, *Insecta* 7371. *Beauveria bassiana*, *Nomuraea rileyi*, susceptibility, *Bombyx mori* 8130. bioassays, *Bacillus thuringiensis israelensis*, *Aedes polyneisensis*, *Aedes pseudoscutellans*, *Aedes aegypti* 5732. bioassays, *Beauveria bassiana*, *Trichoplusia ni* 8984. biological control, apiculture pests, nuclear polyhedrosis virus, *Galleria mellonella* 8456. biological control, *Bacillus thuringiensis*, *Chironomidae* 1007. biological control, *Bacillus thuringiensis*, *Culicidae* 630. biological control, *Bacillus thuringiensis*, serotype H-14, *Culex quinquefasciatus* 6159. biological control, *Bacillus thuringiensis*, *Spodoptera littoralis* 1011. biological control, baculovirus infection, *Oryctes rhinoceros*, Tonga 1822. biological control, baculovirus, *Oryctes rhinoceros*, Western Samoa 6184. biological control, conferences, *Culicidae* 7128. biological control, crop protection, *Phyllocoptruta oleivora*, *Hirsutiella thompsoni*, USA, Florida 4548. biological control, effects on mortality, *Bacillus sphaericus*, *Culicidae* 1382. biological control, effects on reproduction, development, *Nosema algerae*, fungi 739. biological control, fungi, culture methodology, environmental conditions, *Vermiculium luteum* 4920. biological control, fungicides effects on, *Nomuraea rileyi*, *Lepidoptera*, *Glycine max* 716. biological control, granulosis virus, biochemical characteristics, *Pieris brassicae*, *Pieris rapae* 1468. biological control, *Insecta*, *Bacillus thuringiensis* 2218. biological control, larvae, *Bacillus thuringiensis*, *Achaea janata* 2644. biological control, larvae, *Bacillus thuringiensis*, *Dacnusa obliqua* 2985. biological control, pests, crop fields, *Entomophthora*, *Aphis fabae* 7760. biological control, pests, *Persea americana*, Israel 3900. biological control, spores, *Bacillus thuringiensis israelensis*, streams 6101. biological control, storage, *Vermiculium luteum*, *Insecta* 2217. biological control, toxins purification, *Bacillus sphaericus*, *Anopheles* 8187. biological control, *Vermiculium luteum*, *Trialeurodes vaporariorum*, *Aphis gossypii* 8577. cell culture, tissue culture, *Drosophila C virus*, protein biosynthesis, *Drosophila melanogaster* 1032. colonies, *Ascosphaera apis*, *Apis mellifera* 1803. *Cordyceps ophiostoma*, *Isopoda*, Mexico 2626. *Culicoides* caryae biological control, fungicides effects on, *Beauveria bassiana*, *Metarhizium anisopliae* 1402. cytoplasm incompatibility, hybrids, *Aedes polyneisensis*, *Aedes kesseli* 5488. detection methodology, enzyme-linked immunosorbent assay, *Euxoa scandens* cytoplasmic polyhedrosis virus 8007. detection, methodology, *Zoophthora phytonomi*, *Hypera postica* 4095. development, *Nosema apis*, *Apis mellifera* 4210. disease control, vectors eradication, *Simulium naevae*, *Onchocerca volvulus*, Kenya 1327. disease transmission, bacteria, *Argas persicus*, *Argas afulriculmbae* 4501. disease transmission, *Erwinia carotovora*, *Insecta* 8493. disease transmission, feeding, *Xanthomona malvacarum*, *Earias* 7830. disease transmission, *Metarhizium anisopliae*, *Hylobius pales*, *Macrocheles*, *Histiogaster anops* 6047. disease transmission, *Metarhizium anisopliae*, *Reticulitermes* 8153. disease transmission, role, salivary gland, *Ixodidae* 2917. disease transmission, salivary gland, *Trypanosoma brucei*, *Glossina morsitans* 3674. disease transmission, sheep, *Karai virus*, *Rhipicephalus evertsi* 4512. diseases elimination, effects on, *Nosema*, *Galeruca* 281. dose, Venezuelan equine encephalitis virus vectors, *Culex taeniosus* 3400. Dutch elm disease biological control, *Scolytus multistriatus* vectors, *Pseudomonas syringae* 4526. ecology, *Aphididae*, *Entomophthoraceae*, France 2622. effects on gut histopathology, *Pieris rapae*, *Lymantria dispar*, *Ephestia cautella* 7382. effects on hosts growth, development, *Farinocytis tribolii*, *Tribolium castaneum* 1027. effects on larvae development, nuclear polyhedrosis virus, *Bacillus thuringiensis*, *Heliothis armigera* 7377. effects on mortality, growth, *Spodoptera*, *Galleria mellonella* 2648. effects on mortality, *Sitophilus zeamais* 2039. effects on survival decline, *Neozygites floridana*, *Tetranychus urticae* 8400. effects on survival, feeding, *Bacillus thuringiensis*, *Heliothis virescens* 8159. efficacy, *Bacillus thuringiensis*, *Heliothis virescens* 8160. eggs, immune response (cell-mediated), *Asobara tabida*, *Drosophila melanogaster* 1819. electron microscopy (scanning), ultrastructure, baculovirus, cytoplasmic polyhedrosis virus, entomopoxvirus, *Insecta* 8143. 8-endotoxin, toxicity, histopathology, *Bacillus thuringiensis*, *Pieris rapae*, *Lymantria dispar*, *Ephestia cautella* 7381. *Entomophthora phytonomi*, photoperiods, humidity, effects on, *Hypera postica* 286. *Erwinia carotovora*, survival, vectors, *Drosophila melanogaster*, *Drosophila busckii* 1446. functional morphology, dimorphism, *Xenorhabdus*, *Galleria* 4189. fungi, biological control, *Insecta* 1471. fungi, infection, *Lymantria dispar* 5741. fungi, taxonomy, *Entomophthora* taxonomic revision effects on 830. fungi, susceptibility, *Plasmodium berghei* berghei, *Anopheles atroparvus* 9015. growth, casein, trehalose effects on, *Nomuraea rileyi*, *Noctuidae* 1812. host specificity, tropical environment, forests, *Cordyceps*, *Insecta* 3649. hosts, *Conidiobolus obscura*, *Acyrtosiphon pisum*, *Sitobion avenae* 2621. hosts immunity, *Neoplectana carpocapsae*, *Hyalophora cecropia* 2641. identification, electrophoresis, *Trypanosomatidae*, *Insecta* 5032. incidence, pests, *Spodoptera frugiperda*, *Heliothis zea*, USA, Georgia 3407. infection, bacteria, *Boophilus decoloratus* 5030. infection, *Brucella canis*, *Rhipicephalus sanguineus* 5029. infection, *Culicoides punctulatus* 3413. infection, development, *Parafilaria bovicola*, *Musca xanthomela*, *Musca lusona* 5725. infection, effects on hosts fecundity, *Nosema carpocapsae*, *Cydia pomonella* 2632.

Pathogens, (continued)

- infection, effects on population levels, *Nosema pyrausta*, *Ostrinia nubilalis* 5356
infection, effects on sex ratio, *Nosema whitei*, *Tribolium castaneum* 6036
infection, effects on survival, development, *Aedes aegypti*, *Simulium culicetae* 2645
infection, effects or eggs development, *wolbachia*, *Aedes polynesiensis* 1542
infection, factors affecting sporulation, *Acyrtophisphion kondoi* 2646
infection, isolation, media (isolation), *Haemaphysalis leporispalustris* 4187
infection, larvae, *Microsporida*, *Simulium* 1018
infection methodology, *Entomophthora grylli*, *Acanthia* 5627
infection, *Nomuraea rileyi*, *Popillia japonica* 5737
infection, nuclear polyhedrosis virus, effects on mortality, longevity, fecundity, *Pseudoplusia includens* 7390
infection, *Ornithomyia simplex* infestation effects on, *Fusarium*, *Asparagus officinalis*, *USA*, *Massachusetts* 6134
infection, overwintering larvae, *Laspeyresia pomonella* 9004
infection, population regulation, *Triplaspium*, *Tetranychus evansi*, *Brazil* 4197
infection, seasonal variations, Aphididae, *Entomophthoraceae*, *France* 4213
infection, *Snattium morbosum*, *Anopheles hilli* 1008
infection, *Staphylococcus aureus*, effects on hemolymph, *Anthonomus grandis* 5711
infection susceptibility, exotoxins, *Bacillus thuringiensis*, *Leptinotarsa decemlineata* 5734
infection, susceptibility, mortality, *Nomuraea rileyi*, *Trichoplusia ni*, *Anticarsia gemmatilis* 5755
infection susceptibility, *Nomuraea rileyi*, *Noctuidae* 5736
infection, ultrastructure, *Barroussia schneideri*, *Lithobius forficatus* 5754
infection, ultrastructure, morphogenesis, *Nomuraea rileyi*, *Anticarsia gemmatilis* 4208
infection, *Verticillium lecanii*, *Cecidophorus rubus*, *British Isles* 1811
infectivity, bioassays, silicicolines, *Anopheles hilli* 1039
infectivity, virulence, *Microsporida*, *Aedes aegypti* 8127
infestation, abdomen, *Beauveria alba*, *Achaearanea* 3409
infestation, *Entomophthora culicis*, *Chironomidae*, *USA*, *New York* 5036
ingestion, pathogenicity, *Metarhizium anisopliae*, *Beauveria bassiana*, *Gliocladium virens*, *Reticulitermes* 8150
isolation, infectivity, *Theileria annulata*, *Hyalomma excavatum* 6607
isolation, *Massospora cicadettae*, *Massospora pabariae*, *Cicada* 6605
larvae, conidia discharges, *Manestria brassicae*, *Entomophthora* 3410
larvae, *Entomophthora egressa*, *Choristoneura fumiferana* 1030
larvae, *Erynia aquatica*, *Aedes stimulans*, *USA*, *New York* 8152
larvae mortality, *Snattium morbosum*, *Anopheles hilli* 1807
larvae mortality, *Synanthodon salmaceus*, *New Zealand* 4415
larvae susceptibility, biological control, *Anopheles stephensi*, disease transmission 654
larvae, *Typhlocyba cylindrosporum*, *Aedes australis* 4211
life cycle, infection, *Nosema carpocapsae*, *Cydia pomonella* 2633
life history, *Sporozoa*, *Orthoptera*, *Coleoptera* 5025
livestock, vectors, *Theileria taurogalli*, *Rhipicephalus appendiculatus* 3657
microorganisms, disease resistance, *Insecta* 7370
milkly disease, infectivity, *Scarabaeidae*, *Apodius tasmaniae* 624
morphogenesis, cytoplasmic polyhedrosis virus, *Heliothis armigera* 3397
mortality, biological control, *Bacillus thuringiensis*, *Spodoptera littoralis* 2643
mutants, enzymes, cell surface, virulence, *Pseudomonas aeruginosa*, *Galleria mellonella* 4198
new records, characterization, rickettsia-like disease, *Scotogramma trifolii* 8169
new records, *Coleomomyces*, iridescent virus, *Aedes cantans*, *Aedes cinereus*, *Sweden* 8139
new records, *Entomophthora erupta*, *Notostira elongata*, *Switzerland* 6609
new records, *Entomophthora*, *Insecta*, *Finland* 5721
nuclear polyhedrosis virus, biological control, efficacy, *Ostrinia nubilalis* 8443
nuclear polyhedrosis virus, diets, rearing, *Lymantria dispar* 3702
nuclear polyhedrosis virus, DNA restriction endonuclease mapping, *Spodoptera littoralis* 5758
nuclear polyhedrosis virus, growth, larvae, *Manestria brassicae* 4618
nuclear polyhedrosis virus, infection susceptibility, *Heliothis zea*, *Spodoptera frugiperda* 5746
occurrence, seasonal variations, *Erynia phytomyi*, *Hypera postica*, *USA*, *Georgia* 8154
parasites, interaction, pest control, models 1455
parasites, *Neoplectiscus carpocapsae*, *Hypoconer exiguae* 1804
persistence, biological control, *Bacillus thuringiensis*, *Trichoplusia ni*, *Heliothis virescens* 724
pest control, apiculture, *Bacillus thuringiensis*, *Galleria mellonella* 3834
pest control, *Bacillus thuringiensis*, *Anticarsia gemmatilis*, *Cesotoma trifurcata* 2236
pest control, baculovirus, *Metarhizium anisopliae*, *Oryctes rhinoceros*, *Western Samoa* 3348
pest control, biological control, *Insecta* 8532
pest control, biological control, *Nosema locustae*, *Melanoplus sanguinipes* 3813
pest control, biological control, population dynamics, mathematical models, *Insecta* 8452
pest control, biological control, *Verticillium lecanii*, *Trialeurodes vaporariorum* 4623
pest control, efficacy, *Aedes aegypti* 5735
pest control, efficacy, *Aphis fabae*, *Entomophthoraceae* 3038
pest control, efficacy, *Trichoplusia ni*, *Heliothis zea* 8457
pest control, exotoxins, *Bacillus thuringiensis*, *Epilachna varivestris* 4598
pest control, *Gryllidae* 1398
pest control, *Lycopodium esculentum* crop fields, *Bacillus thuringiensis*, *Lacanobia oleracea* 5300
pest control, *Nomuraea rileyi*, *Heliothis zea* 9134
pest control, nuclear polyhedrosis virus, *Bacillus thuringiensis*, *Choristoneura occidentalis*, *Canada*, *British Columbia* 4589
pest control, transmission (transovarial), *Vairimorpha necatrix*, *Nosema pyrausta*, *Lepidoptera* 8125
pest control, viruses, *Insecta* 1386
pest control, water pollution, effects on biological control, *Leguminifera*, *Culex quinquefasciatus* 4513
pesticides effects on growth, *Beauveria bassiana*, *Leptinotarsa decemlineata* 6152
phages, morphology, ultrastructure, isolation, *Apis mellifera*, *Bacillus larvae* 8138
plaque assay, nuclear polyhedrosis virus, *Galleria mellonella* 8144
production methodology, *Leptinotarsa decemlineata* biological control, *Beauveria*

Pathogens, (continued)

- bassiana* 1404
Rumicaphalus olivaceus, *Cernagion olivaceus*, *India* 282
resistance, deficient mutant, gene expression, *Drosophila melanogaster* 3879
reviews, *Ascocheta* spp., *Ascocheta* major, *Arthronosphaera cranei*, *Apis mellifera* 8156
salinity, effects on growth, infection, *Leguminifera*, *Aedes taeniorhynchus* 6606
salivary gland, virions, *Triatoma infestans* 3421
serotyping, *Rickettsia*, *Dermacentor Andersoni*, *USA*, *Montana* 1006
sheep, effects on oviposition, *Laelia cuprina* 1333
surveys, granulosis virus, *Choristoneura conflictana*, *Canada*, *Ontario*, *Canada*, *British Columbia* 4196
surveys, *Telegonylus commodus*, *Australia*, *Victoria* 1003
survival, digestive tract, *Moraxella bovis*, *Musca autumnalis* 8136
susceptibility, *Aedes*, *Brugia malayi*, *Brugia pahangi* 2647
susceptibility, biological control, *Diptera*, *Bacillus thuringiensis israelensis* 7651
susceptibility, disease resistance biotypes, *Erynia neophipis*, *Acyrtophisphion psum* 8138
susceptibility, *Felita subterranea*, *Spodoptera frugiperda*, *Heliothis zea* 9011
susceptibility, genetics, *Aedes aegypti*, *Drosophila*, *Brugia* 2623
susceptibility, instars, temperature effects on, *Bacillus*, *Aedes stimulans* 1817
susceptibility, mortality, larvae, *Choristoneura fumiferana*, *Heterorhabdus heliothis* 9014
synergism, *Xenorhabdus luminescens*, *Heterorhabdus bacteriophora*, *Culex pipiens* 4202
toxicity, spores, crystals, *Bacillus thuringiensis*, *Ostrinia nubilalis* 5780
transmission, *Anaplasma marginale*, blood meals, cattle, *Arthropoda* 7628
transmission, *Babesia microti*, *Ixodes dammini* 635
transmission, crop fields, *Erynia carotovora*, *Drosophila melanogaster* 3424
transmission, *Theileria mutans*, *Amblyomma hebraeum*, *South Africa* 665
transmission (vertical), infection effects on fecundity, *Microsporida*, *Aedes aegypti* 8129
vectors, *Amblyomma maculatum*, *Cowdria rumnanti* 7639
vectors, control, *Culex pipiens*, *Wuchereria bancrofti*, *Africa* 1316
vectors, parasites, *Macrophages*, *Metarhizium anisopliae*, *Hylobius pales* 4207
virulence, *Autographa californica* nuclear polyhedrosis virus, *Trichoplusia ni* 3417
viruses, isolation, *Culicoides*, *Israel* 3690
viruses, isolation, *Ixodes urae*, *France*, *Brittany* 4188
viruses, phasmodic properties, *Apis mellifera* 1033
zoophilic incidence, dead larvae, measuring techniques, *Hypera postica* 8010
zoophilic radicans, *Entomophthora egressa*, biological control, host-parasite interactions, *Thymelicus lineola* 3420
- Pathology.**
Bacillus thuringiensis 8-endotoxin, *Galleria mellonella* 1023
biological control, *Bacillus thuringiensis*, *Lepidoptera* 997
biological control, hosts, parasite effects on, *Mermithidae*, *Insecta* 3749
characterization, *Nidarella* 15 virus, *Dasytychus pidiubunda* 1827
condita, infection enzymatic activity, *Beauveria bassiana*, *Heliothis zea* 5028
diseases, bacteria, *Insecta* 766
eggs, *Phlebotomus* *disruptus* infection, *Disruptus morosus* 9008
8-endotoxin, *Bacillus thuringiensis*, *Aedes aegypti* 2637
fat body infection, *Amblyopora californica*, *Aedes*, *Culex tarsalis* 283
granulosis virus, infection, larvae, *Percallia nana*, body weight 1805
hemolymph, blood cells, *Bacillus popilliae*, *Anomala corpulenta*, *Holotrichia obliata* 2640
host-parasite interactions, *Trypanosoma*, *Glossina* 1021
hosts, parasites effects on, biological control, *Mermithidae*, *Simulidae* 3403
immunological aspects, host-parasite interactions, *Sitotrogon scabiei* 3671
infection, *Amblyopora californica*, *Culex tarsalis* 2629
infection, *Beauveria bassiana*, *Heliothis zea* 5750
infection, cytoplasmic polyhedrosis virus, *Earias biplaga* 3419
infection, immune response, *Nomuraea rileyi*, *Spodoptera frugiperda* 1806
infection, mudgut, *Leshmaniana aethiopica*, *Phlebotomus pedifer* 8157
infection, nuclear polyhedrosis virus, *Spodoptera exigua* 1823
infection, parasites, *Xenorhabdus luminescens*, *Pseudomonas aeruginosa*, *Heterorhabdus bacteriophora*, *Culex pipiens* 5728
infection, rickettsia-like organisms, *Trichoplusia ni*, *USA*, *California* 5731
infestation, *Camelus dromedarius* 6891
infestation, case reports, *Notodreps cati*, *Felis rufus*, *USA*, *Texas* 3685
infestation, epizootics, *Cordyceps unilateralis*, *Camponotus*, *Brazil*, *Amazonas* 4023
larvae mortality, granulosis virus, *Cydia nigricana*, *Cydia pomonella* 272
larvae mortality, granulosis virus, *Pieris brassicae*, *Pieris rapae* 270
larvae mortality, nuclear polyhedrosis virus, *Spodoptera exempta* 271
larvae mortality, nuclear polyhedrosis virus, *Trichoplusia ni*, *Galleria mellonella* 269
larvae parasites, *Burellia dimorpha*, *Solenopsis geminata* 279
morphology, parasitism, pseudogynes, *Formica* 8164
parasites effects on hemolymph cells, *Plagiostichus cylindricus*, *Armadillidium vulgare* 1012
parasites infection, gastrointestinal tract, *Trypanosoma brucei rhodesiense*, *Glossina morsitans* 1020
parasites, infection, *Maturolella crustosa*, *Nasutitermes*, *Panama* 4199
parasitism, morphology, salivary gland, *Babesia microti*, *Ixodes ricinus* 1005
parasitism, synergism, *Xenorhabdus luminescens*, *Heterorhabdus bacteriophora*, *Culex pipiens* 4202
Railletia *ursi* 631
scabies, herpes genitalis association, man 3696
vectors, raspberry vein chlorosis virus, *Aphis idaei* 276
viruses, larvae, *Amyelous transiella* 267
viruses, nuclear polyhedrosis virus, *Mythimna separata*, effects on, larvae, *Phlosoma ricini* 1813
- Patterns.**
flashing, central nervous system organization effects on, *Photuris versicolor* 265
imaginal disc regeneration, genetics, *Drosophila* 4252
sound production (biological), diurnal variations, *Glossina morsitans* 261
- Pausia gularis**
new species, parasitoids, *India* 7213
- Pausia hazratbalensis**
new species, parasitoids, *India* 7213
- Pausia himalayensis**
new species, parasitoids, *India* 7213

- Panonia**,
host plants, nectar, competition, Phacthormis, Trigona ferricauda, Panama 4409.
- Pauridia peregrina**,
temperature, relative humidity, effects on survival, fecundity 7504.
- Pauripoda**,
new records, geographical distribution, Canada, Ontario 8691.
- Pauripodidae**,
geographical distribution, new records, USSR 4070.
- Paxylomacridae**,
Hybrizon, taxonomy, morphology 1647.
- PCB**,
pollution effects, bioaccumulation, food chains, Bacillus, Aedes aegypti, Leibes reticulatus 7811.
- Pea enation mosaic virus**,
disease transmission, Acyrthosiphon pisum 8488
- Peatlands**,
bogs, occurrence, Microlepidoptera, Czechoslovakia 9481.
- Pectinophora gossypiella**,
allitin, pest control, India 7701
attractants, efficacy, pest control 1476
comparative studies, biological control, natural enemies, sex pheromone, USA, Arizona 1463
competition, fitness, competition, wild type 8364
crop fields infestation, host plants flowering effects on, Gossypium 3765
developmental stages, fatty acid composition, diets lipids 167
diapause, environmental effects, temperature, photoperiods 1096
diapause, genec analysis 1100
diets effects on longevity, fecundity, eggs maturation 7459
emergence, soil moisture, soil temperature effects on 6013
habitation habituation, effects on males mating behavior 426
host plants fatty acids effects on growth 4414
hosts, karomones, host-searching behavior, Chelonus curmaculatus 5944.
holes, pheromone traps, design, efficiency 2477
overwintering populations, integrated control 3021
oviposition, host plants, Gossypium 6157
parasitoids, life cycle, feeding, Parastelia 6771
pest control, chemical control, fenvalerate 5326
pest control, crop protection, economics, Gossypium, Sri Lanka 6110
pest control, sex pheromone application, meteorology 4596
pest resistance, host plants, Gossypium arboreum 8441
pests, abundance, fertilizer application effects on, Gossypium 6973
pests, control programs, population dynamics, parasites, Gossypium hirsutum 1444
pests, damage, historical account, infestation, USA, California, Imperial Valley 8558.
pests, infestation, agricultural practices effects on, Gossypium 6972.
radiation, sexual reproduction, longevity, progeny 2688
soil temperature effects on mortality, pupation, reproduction 6167.
- Pectinophora aculeata**,
developmental stages, morphogenesis, growth rate 3464.
reproduction, fecundity, life history 3549.
- Pedetontus unimaculatus**,
embryos, morphology, larvae, comparison, Petrobius brevistylis, Machilis alternata 336.
midgut epithelium, morphogenesis 3309.
- Pedicia parvicellula**,
spiracles, aerophiles, respiration, gas exchange 4145.
- Pedicularis**,
pollination, dispersion, interspecific relationships, Bombus, USA, Alaska, Atkasook 4404.
- Pediculiidae**,
infestation, man, epidemiology, treatment, life cycle 2916
- Pedilinus corporatus**,
infestation, man, epidemiology, treatment 2916
- Pediculus humanus**,
epidemiology, infestation, synergism, man, India, Goa 4517.
epidemiology, socio-economic aspects, man, Malaysia 657
ovary, anatomy, histology, developmental stages, aging methods 4242
symbiosis, migrations, bacteria 4366
- Pediculus humanus capitis**,
chemical control, carbaryl treatment, man 3665.
infestation, man, epidemiology, treatment 2916.
- Pedilobius foveolatus**,
parasitism, biological control, Epilachna varivestis 2032
- Pedlocetes phasianellus**,
ectoparasites, surveys, Arthropoda, Canada, Manitoba 1230.
- Pegohylemyia macra**,
taxonomy, synonymy, Hylemyia betarum 30.
- Pelecanus erythrorhynchus**,
juveniles, infestation, parasites, Piagetella peralis 9148
- Pelidnoptera fumpennisi**,
synonymy, Pelidnoptera fuscipennis 5572
- Pelidnoptera fuscipennis**,
synonymy, Pelidnoptera fumpennisi 5572.
- Pelina truncatula**,
feeding behavior, life cycle, larvae, Cylindrospermum 2779
- Pelienes**,
sex chromosomes, species comparison 7033.
- Pelkylla malabarica**,
food availability, females, water content, effects on, spermatophores, deposition 1875.
- Peltoperla ada**,
synonymy, Viehopera zipha 6458.
- Peltoperlidae**,
taxonomy, morphology, keys 6458.
- Pemphigus betae**,
host selection, host plants, chemical properties, phenols, Populus angustifolia 8345.
- Pemphigus populicaulis**,
geographical variations, variability, morphology 71.
- Penetration**,
host plants, mouthparts, Icerya seychellarum, Aldabra Atoll 4395
insecticides, topical application, thiobisformamides, Diatraea grandiosella 4232.
- Penfluron**,
insecticides, pest control, inhibition, sexual reproduction, Poekilocerus pictus 4619.
- Penfluron**, (continued)
toxicity, chitin biosynthesis, Chrotogonus trachipterus 6620.
- Penicillida monoceros**,
geographical distribution, new records, Sweden 3946.
- Penicillidia dufourii**,
new records, geographical distribution, Philippines 1579.
- Penicillium**,
interspecific relationships, fruits, breeding sites, Drosophila immigrans 6051.
Penicillium oxalicum,
interspecific relationship, Zea mays, Ostrinia nubilalis 6899.
- Penicillium oxalicum**,
infection, Leptocrocia acuta, nymphs 1815.
- Penis**,
functional morphology, Celithemis eponina 3262.
- Pennisetum americanum**,
pest resistance, heritability, Blissus leucopterus 4638.
pest resistance, inheritance, genetic factors, Blissus leucopterus leucopterus 8460.
- Pennisetum setosum**,
food plants, Erypanis polyxena polyxena 8874.
- Pentalimastix nacoelae**,
parasites, hosts, Parotis vertumnalis, new records, India, Kerala 2031.
- Pentalonia nigropervosa**,
pathogenicity, Paezilonmyces farinosus 1001.
pest control, insecticides, malathion, monocrotophos, dimethoate, quinalphos, fenvalerate, phosalone, fenitrothion, endosulfan, toxicity, mortality 1843.
- Pentastomida**,
parasites, check lists, Mammalia, New Zealand 1231.
- Pentastoma kunguensis**,
new species, taxonomy, morphology, China, People's Rep. 2436.
- Pentatomidae**,
hosts, parasitism, Tachinidae, USA, Texas, USA, South Carolina 2019.
keys, North America 5809.
overwintering behavior, ecological distribution, USA, South Carolina 455.
predatory behavior, excretory products effects on, Euthyrhynchus floridanus 2898.
thermoregulatory behavior, posture, environmental factors 7503.
- Pentatomus**,
exocrine glands, integument, sexual dimorphism 985.
flight activity, seasonal variations 474.
systematics, classification systems, karyotypes 7977.
- Pentodontini**,
keys, morphology 7950.
- Peocloechirus neophori**,
phoretic behavior, carriers preferences, genetic variance 8663.
- Peoria padreella**,
new species, taxonomy, morphology, North America 7230.
- Pephyseia**,
taxonomic revision, identification keys 4857.
- Pephyseia longirhynchus**,
new species, taxonomy, morphology 4857.
- Pephyseia microlevis**,
new species, taxonomy, morphology 4857.
- Peponasium pruinosum**,
pollination efficiency, Cucurbita pepo 6797.
- Peptidae**,
characterization, tissues distribution, Ceratiti capitata 933.
- Peptide mapping**,
alcohol dehydrogenase, genetic variance, population genetics, Drosophila melanogaster 7874.
isozymes, composition, biochemical analysis, Drosophila melanogaster 4670.
- Peptide synthesis**,
amanin analogs, Drosophila melanogaster 3074.
venom, nucleotide sequence, Vespidae 961.
- Peptides**,
brain, amino acid composition, Calliphora vomitoria 7290.
cecropins, secondary structure, antibacterial activity, Hyalophora cecropia 7314.
localization, neurosecretory cells, Locusta migratoria 8907.
- Peserion antiquum**,
attack, developmental stages, weed control, Emex australis 5205.
introduced species, weed control, Emex australis, Australia 6078.
- Perarthrus vittatus**,
infestation, host plants, Artemisia californica, USA, California, San Diego Co 6810
- Peratogonus grandis**,
new species, taxonomy, morphology 4786
- Perception**,
gravity, neurophysiology, Calliphora erythrocephala 7299.
sensory stimuli, wind, neurons, Periplaneta americana 7291.
- Perdita indioensis**,
venom gland skeleton, morphology 93
- Peregrius maidis**,
disease transmission, maize stripe virus, Zea mays 8455.
vectors, disease transmission, maize sterile stunt virus 7646.
- Pericallia ricini**,
Larvae, body weight, viruses, pathology, granulosis virus 1805
- Perikoma**,
geographical distribution, Germany, Fed. Rep., Bavaria, Murnauer Moos 4730
- Perikoma bavarica**,
new species, taxonomy, morphology, geographical distribution, Germany, Fed. Rep., Bavaria, Murnauer Moos 4730
- Pericopinae**,
taxonomy, morphology, Antilles 5606
- Pericopsis leucophaea**,
food selection, defoliation, Vernonia patens, Costa Rica 5164.
- Peridroma saucia**,
pests, feeding site preferences, Apium graveolens 8550
temperature effects, development, oviposition 2685
- Periglischus**,
morphology, ultrastructure 7279.
- Periodicity**,
activity patterns, Culicidae, Brazil 4498
diurnal variations, flight activity, traps, Tortricidae 52
emergence, diel activity: light effects, Chronomidae, USA, Florida 152
flight activity, diurnal variations, Delphacidae, Cicadellidae 6711.
flight activity, Lepidoptera, Malaysia 7514
flight activity, seasonal variations, Odonata 4440.

Periodicity, (continued)

- metabolism, diapause, pupae, Sarcophagidae 3477.
pheromone emission, sex pheromone, *Lymantria dispar* 4312.
- Peripatus acacoli**,
ultrastructure, excretory systems, body organs 4151.
- Peripheral nerves**,
axons growth, central nervous system, embryogenesis, Acrididae 333.
growth, central nervous system, embryogenesis, Acrididae 332.
nerve 3B, ultrastructure, strand receptors, trachea, Orthoptera 8067.
- Peripheral nervous system**,
innervation, mechanoreceptors, leg, *Schistocerca gregaria* 8905.
role, posture reflex tonus, *Periplaneta americana* 8918.
- Periplaneta**,
regeneration, axons 346.
- Periplaneta americana**,
osmoregulation, excretion, water balance 5011.
- Periplaneta**,
axons, action potential, sodium currents, *Buthos judaicus* venom toxins effects on 8182.
chilling, effects on nerve transmission, locomotion 7360.
morphology, giant axons 897.
- Periplaneta americana**,
acetylcholine distribution, nervous system 1736.
N-acetylcholine, nervous system tissues, ganglia 128.
 α -aminobutyric acid transport, abdomen ganglia, autoradiography localization 8066.
benzyl chrysanthemates, toxicity, neurophysiology, physicochemical properties 5796.
biology, books 5544.
cell lines, nutrient requirements, vitamins 877.
central nervous system, anatomy, physiology 4963.
circadian rhythms, activity patterns, physiology 4985.
circadian rhythms, enzymatic activity, acetylcholinesterase 154.
circadian rhythms, locomotor activity, running, photoperiods effects on 918.
circadian rhythms, 5-hydroxytryptamine, electrical properties, frontal ganglion 8068.
circulatory system, hemolymph, metabolism 4989.
colchicine effects on mechanoreceptors, electrical properties 3291.
compound eyes, development, morphology 3296.
cytology, central nervous system cells 3266.
digestive enzymes, enzymatic activity, acclimation, temperature effects 3372.
digestive tract, epithelium, immunochemistry, histology 925.
digestive tract, regulatory enzyme activity 2548.
drug effects, cycloheximide, pyrimycin, avoidance learning, retention 3548.
electron microscopy, femur spine neurons, mechanoreceptors, 122.
embryogenesis, development 5070.
embryogenesis, development, nervous system, muscles 5812.
embryos, development, nerves, muscles, leg 8216.
enzymatic activity, fat body, calcium effects on, hormones 1759.
enzymatic activity, lipid metabolism 948.
erythropoietin B effects on hemocytes 5789.
escape behavior, walking, neurophysiology 2529.
exocytosis, secretions, granules, cells, endocrine function, midgut 8077.
fat body, metabolism 4998.
flight, effects on lipid metabolism, flight muscle 958.
GABA, neurotransmitters, inhibitors, neurons 127.
host plants, host-parasite interactions, host specificity, *Testastrachus hagenowii* 504.
hosts, parasites abundance, diurnal variations, digestive tract, *Thelastoma bulboi* 2642.
hydrocarbons, biosynthesis 954.
hydrocarbon transport, hemolymph, cuticle 7307.
immune response (humoral), parasites, *Hymenolepis diminuta* 1010.
insecticides, trialomethrin, talocrythin, metabolism, degradation 316.
integument, cuticle development 4953.
laboratory animals, books 6336.
leg muscles, motor neurons, regeneration, octopamine receptors 8912.
leg muscles, resting tension, posture 7286.
leg sensilla, mechanoreceptors, typology, morphology 4980.
lesions, neurons, dendritic branching, metathoracic coxal depressor motoneuron 7292.
lindane, topical applications, effects on carbohydrates, lipids 5791.
lipid metabolism, linoleic acid biosynthesis 6564.
males, chemotaxis, sex pheromone, orienting response 2760.
mechanoreceptors, nervous system 2537.
mechanoreceptors, nervous system 3285.
mechanoreceptors, neurophysiology 4130.
mechanoreceptors, ultrastructure, pressure effects 145.
metamorphosis, tyrosine 3-monooxygenase activity, tyrosine levels 9042.
nerve permeability, cardiac glycoside 7310.
motor neurons structure, muscles, leg 8906.
muscles, locomotion, neurophysiology, morphology 4958.
neuroendocrine system, hormones, neurosecretions 5004.
neurohormone D, biochemical characteristics, amino acid composition 5698.
neurohormone D, effects on heart rate 5674.
neurons, cerci, anatomy 5664.
neurons lesions, effects on motor activity 4128.
neurons, Octopamine receptors 130.
neurophysiology, toxicity, piribedil, nerve transmission 3280.
neurophysiology, venom effects on, *Phanthus triangulum* 4217.
neurosecretion, optic lobe, cytology, histology 4180.
neurotoxins, pyrethroids, insecticides, effects on, nervous system 1040.
neurotransmitters, lunar rhythm 121.
nutrition, digestive tract, physiology 4992.
olfactory perception, lemon oil components, electrophysiological recording, antennae 7295.
palytoxin, effects on giant axons, sodium, potassium channels 8176.
peripheral nervous system, role, motor neurons, posture reflex tonus 8918.
pheromones, chemical communication, social behavior 5119.
proctolin, analogs, structure-activity relationships 8957.
regeneration, physiology 5073.
reproductive system, physiology 5099.
reproductive systems, steroids biosynthesis 6655.
respiration, trachea, morphology 4987.
sense organs, sensilla, physiology, morphology 4978.
sensory stimuli, transduction, mechanoreceptors 2536.

Periplaneta americana, (continued)

- sex pheromone attractancy, periplanone-B, pheromone traps 5007.
sex pheromone, attraction, orientation, males 4302.
sex pheromone mimics, attractancy, (+)-trans-verbenyl acetate 4311.
sex pheromone mimics, effects on activity 1923.
sex pheromone, mimics, electroantennograms, sex differences 970.
synthetic sex pheromone, effects on orientation 4307.
temperature perception receptors, ultrastructure 146.
toxicity, benzyl chrysanthemates, neurophysiology, symptoms 5795.
toxins, effects on giant axons, *Androctonus australis* 5801.
walking, escape behavior, mechanical stimuli discrimination, escape behavior 2752.
wind, perception, neurons, sensory stimuli 7291.
- Periplanone-B**,
sex pheromone, attractancy, pheromone traps, *Periplaneta americana* 5007.
- Perisierola**,
life history, *Symmetrischema capsica* parasites 6720.
- Perisphaerus**,
maternal behavior, mother-offspring interactions, feeding, nymphs 2746.
- Perissopalla caliciata**,
new species, taxonomy, morphology, Venezuela 4764.
- Perissopalla popoi**,
new species, taxonomy, morphology, Venezuela 4764.
- Perissopalla rationalis**,
new species, taxonomy, morphology, Venezuela 4764.
- Perithemis rubita**,
new species, taxonomy, morphology, Ecuador 6451.
- Peritrichal glands**,
lateral neurosecretory cells, morphology, histology, *Argas arboreus* 8069.
- Peritropia**,
new genera taxonomy, morphology, Madagascar 4852.
- Peritropia malgache**,
new species taxonomy, morphology, Madagascar 4852.
- Peritropic membranes**,
synthesis, ultrastructure, development, electron microscopy (scanning), *Trichoplusia ni* 340.
- Peritoma alchemilla**,
new records, geographical distribution, range extension, Canada, Nova Scotia 7119.
- Periamantis aliberti**,
occurrence, geographical distribution, France 9459.
- Perista placida**,
life cycle, life span, fecundity, emergence, USA, Texas 3859.
- Peritoides aurea**,
nymphs, morphology 8037.
- Permeability**,
cardiac glycoside, midgut, *Oncopeltus fasciatus*, *Schistocerca gregaria*, *Periplaneta americana* 7310.
cuticle lipids, *Arthropoda* 883.
cuticle, salinity effects, osmoregulation, *Cenocrota bifida* hungerfordi 978.
cuticular, water loss, *Lyocosa howarthi*, USA, Hawaii 2607.
malpighian tubules, *Musca domestica* 927.
- Permethrin**,
insecticides, pest control, *Pieris brassicae* 3032.
chemical control, crop protection, grasses, *Heliothis armiger* 728.
chemical control, efficacy, *Psocophora columbica* 744.
insecticides, aerosols, chemical control, *Anopheles quadrimaculatus*, *Culex quinquefasciatus* 6093.
insecticides, chemical control, efficacy, *Holotrichia consanguinea* 7792.
insecticides, ear tags, cattle, chemical control, *Musca autumnalis*, *Haematobia irritans* 9257.
insecticides, efficiency, persistence, chemical control, *Musca domestica* 697.
insecticides, pest control, *Thyridopteryx ephemeraeformis* 2197.
insecticides, pesticide residues, measuring techniques, chromatography, GLC, *Acriddae*, *Acan* 1833.
insecticides, pesticide resistance, detoxification mechanisms, *Musca domestica* 1086.
insecticides, pesticide resistance, strains, *Nilaparvata lugens* 4222.
insecticides, seed treatments, chemical control, larvae, *Delia coarctata* 6133.
insecticides, topical applications, penetration, metabolism, *Wiseana cervinata* 5787.
insecticides, toxicity, *Anthonomus grandis grandis* 9026.
insecticides, toxicity testing, *Aedes triseriatus*, *Culex pipiens pipiens* 3438.
insecticides, cross-resistance, DDT, *Blattella germanica* 5049.
pest control, clothing, *Attagenus megatoma*, *Anthrenus flavipes*, *Tineola bisselliella* 1796.
pesticide resistance, *Musca domestica*, Germany, Fed. Rep. 311.
pesticide resistance, population genetics, *Amblyseius fallacis* 1063.
pesticide resistance, selection, biological control, *Amblyseius fallacis* 6288.
pesticides, effects on oviposition, *Lyctus brunneus* 1060.
repellents, efficacy, *Simulium* 313.
temperature effects on toxicity, *Trichoplusia ni*, *Spodoptera frugiperda*, *Heliothis virescens* 8206.
- Peromyscus leucopus**,
babesiosis, *Babesia microti*, *Ixodes dammini* disease transmission 8422.
hosts, tissues, parasites migration, *Cuterebra fontinella* 2832.
- Peromyscus maniculatus**,
infestation, parasites, *Arthropoda* 2831.
- Peronea fuscana**,
synonym, *Teras obtusana*, Finland 7222.
- Perovidae**,
activity, γ radiation effects on, *Dacus dorsalis* 7356.
activity, insecticides effects on, *Protophormia terraenovae* 9029.
- Persea**,
fruits, pests, abundance, pest control, *Insecta* 1454.
plantations, pest control, natural enemies, *Pseudococcus longispinus* 2945.
- Persea americana**,
damage, leaves, feeding, *Oligonychus punicea* 6165.
leaves, toxicity, *Spodoptera litoralis* 7787.
pests, biological control, *Pseudococcus longispinus*, *Cryptoblabes gnidiella*, *Boarmia selatana*, Israel 5390.
- Persectania avara**,
synonym, taxonomy, *Morrisonia peracuta* 3224.
- Persectania ewingii**,
migrations, flight activity, radar, Australia, Bass Strait 1264.

- Persistence,**
insecticides, chemical control, *Musca domestica* 697.
insecticides, stored products pest control, *Callosobruchus chinensis* 7770.
insecticides, *Trichogramma perkinsi*, *Trichogramma australum* 3020
pathogens, biological control, *Bacillus thuringiensis*, *Trichoplusia ni*, *Heliothis virescens* 724.
pests, grazing, rangelands, eggs, *Hemileuca olivae*, USA, New Mexico, Lincoln Co. 8575.
pheromones, oviposition deterrents, *Pieris brassicae* 217.
sex pheromone, chemical composition effects on, *Insecta* 216.
stored products pests repellents, comparative studies 711.
synthetic sex pheromone, pest control, *Cydia nigricana* 696
- Persistent infection,**
baculovirus, *Spodoptera frugiperda*, cell lines 1728.
Persoonia falcata,
galls effects on meiosis, polyploids, *Insecta* 8343.
- Pertinane,**
insecticides, effects on, *Nilaparvata lugens* 306.
- Pertidha glyphopa,**
population genetics, genetic variance, host plants, *Eucalyptus marginata*,
Eucalyptus rudis 7875.
- Pera,**
new species, taxonomy, morphology, *Anastrepha tecta* 8790
new species, taxonomy, morphology, *Coridolia lenta* 8806
new species, taxonomy, morphology, *Euthima wendae* 8758
new species, taxonomy, morphology, *Exaekidn tetrachanum* 4780
new species, taxonomy, morphology, *Gnongonemus pervianus* 6454
new species, taxonomy, morphology, *Knightonia nigroscutella* 4849
new species, taxonomy, morphology, *Sasacarus inca*, parasites, *Lestoros inca* 1587.
new species, taxonomy, morphology, *Xenelmis leechi*, *Xenelmis marcapata* 4782.
new species, 5 species, *Neolindus* 1616.
- Perubabitha confusa,**
new species, taxonomy, morphology, South America 5587
- Pest attack,**
damage, *Sorghum*, *Diatraea saccharalis* 6080
gallery construction, oviposition, emergence, *Dendroctonus frontalis* 6680
host plants, ethanol, *Picea*, *Dendroctonus rufipennis* 2843.
occurrence, host plants, *Brachiaria*, *Deois flavipicta*, *Zulia enteriana*, Brazil 6158.
- Pest control,**
insecticides, avoidance behavior, *Coptotermes formosanus* 8554.
- Pest control,**
abundance, salt marshes, inland water environment, *Culicidae*, USA, Virginia 8610
acaricides, antibiotics, *Streptomyces hygroscopicus aureolacrimosus*, *Tetranychus urticae*, *Panonychus citri* 5309.
acaricides, coumaphos, Bay Vb 9328 Flowable, cattle, *Boophilus microplus*,
Boophilus annulatus 4509.
acaricides, disease transmission, tick-borne encephalitis virus, *Ixodes persulcatus* 9252.
aggregation behavior, *Metanastria recta*, India, Punjab 7738.
agricultural ecosystems, ecosystem analysis, reviews, *Insecta* 6208.
agricultural practices effects on larvae survival, *Agrotis ipsilon* 611.
agricultural practices, yield, *Insecta*, *Zea mays*, *Vigna unguiculata* 8520.
alarm pheromone, avoidance behavior, host plants, *Aphididae* 7337.
acaricides, disease transmission, tick-borne encephalitis virus, *Ixodes persulcatus* 9252.
allitn, *Gossypium* crop fields, *Pectinophora gossypiella*, *Earias*, *Heliothis armigera*, India 7701.
Allium suipum extracts, effects on, *Syrphus corollae*, *Chrysopa carnea*,
Coccinella septempunctata 9025.
allitn, juvenile hormones analogues, toxicity, *Culicidae* 7739.
Amsacta biguttula biguttula, insecticides, monocrotophops, pesticide residues, toxicity, *Pusa fulgura* 2653.
Amsacta moorei, *Azadirachta indica* extracts, *Vigna acotifolia* 6923.
Amsacta moorei, chemical control, monocrotophops, insecticides, toxicity, mortality 1844.
Anacardium occidentale plantations, rhabdovirus *Oryctes*, *Plocaederus ferrugineus* 8453.
antifeedants, cypermethrin, permethrin, *Pieris brassicae* 3032.
antifeedants, extracts, *Anethum* sowa 7346.
Aonidiella auranti, orchards, effects on community structure, *Formicidae* 2879
apiculture, infestation, *Varrua jacobsoni*, *Trochiloplas clareae* 7750
apiculture, killer bees, *Apis mellifera* adansonii, USA 4636.
apiculture, pathogens, *Bacillus thuringiensis*, *Galleria mellonella* 3834.
aromatic compounds, attractancy, *Malus*, *Rhagoletis pomonella* 8500
attractants, aggregation behavior, *Monochamus alternatus* 1928
attractants efficacy, gossypium, *Pectinophora gossypiella* 1476.
attractants, efficacy, *Melissopus latifemur* 740.
attractants, sex pheromone, air permeation technique, suppression, mating.
Eucosma sonomana 4585
attractants, EL-468, *Elit Lilly*, *Solenopsis invicta* 3437
baits, growth regulators, attractancy, *Camponotus pennsylvanicus* 8969
barriers, alkathene bands, trees, *Mangifera indica*, *Drosicha mangiferae* 7748.
barriers, *Aphididae*, *Solanum tuberosum* 684
barriers, trees, *Mangifera indica*, *Drosicha mangiferae* 7754.
behavior, effects on evaluation, insecticides, *Coptotermes formosanus* 4606
biological control, *Abies balsamea* forests, *Choristoneura fumiferana*, *Bacillus thuringiensis* 8472.
biological control, agricultural ecosystems 3029
biological control, *Alabama argillacea*, *Bacillus thuringiensis*, nuclear polyhedrosis virus 5409.
biological control, antidesiccants, *Neoplectana carpocapsae*, *Leptinotarsa decemlineata* 3778.
biological control, *Bacillus thuringiensis*, *Culicidae* 9012.
biological control, *Bacillus thuringiensis*, *Diacrisia obliqua* 5307
biological control, *Bacillus thuringiensis*, *Galleria mellonella* 6900.
biological control, *baculovirus*, *Insecta* 3771.
biological control, chemical control, cultural control, *Chilo partellus* 3033
biological control, chemical control, *Diatraea saccharalis*, USA, Florida 3777
biological control, efficacy, pathogens, *Aedes aegypti* 5735
biological control, *Epilachna varivestis*, *Bacillus thuringiensis* 8448
biological control, feeding adjuvants, *Heliothis* 4605.
biological control, fungi, *Insecta* 8509.
biological control, genetics, infection, *Plasmodium yoelii nigeriensis*, *Anopheles gambiae* 5338.
biological control, granulosis virus, reviews, *Insecta* 4505.
- Pest control, (continued)**
biological control, greenhouses, *Trialeurodes vaporariorum*, *Encarsia formosa*, Japan 7789.
biological control, Homoptera, Southeast Asia 1451.
biological control, *Insecta*, *Nematoda* 7664.
biological control, *Insecta*, *Nematoda* 7667.
biological control, integrated control, *Planococcus citri*, *Dialeurodes citri*, Italy 3722.
biological control, interspecific relationships, competition 715.
biological control, male sterility, population density, models 714.
biological control, natural enemies, *Pseudococcus comstocki*, USA, California 3018.
biological control, natural enemies, *Rhopalomyia californica* 6171.
biological control, natural enemies, *Spodoptera praefica*, USA, California 4626.
biological control, *Neoplectana carpocapsae*, *Pyrrhula leucola*, *Choristoneura occidentalis* 2953
biological control, New Guinea 5357.
biological control, parasites, agricultural practices, *Diatraea saccharalis*, Barbados 2951.
biological control, parasites, *Aphytis holozanthus*, *Chrysomphalus aonidum*, USA, Texas 3798.
biological control, parasites, methodology, *Trichogramma*, *Heliothis* 1448.
biological control, parasites, pathogens, *Persea americana*, *Pseudococcus longispinus*, *Cryptoblabes gnidiella*, *Boarmiia selenaria*, Israel 5390.
biological control, parasites, population establishment, survival, *Romanomermis culicivora*, *Aedes polynesiensis*, Tokelau Is. 7630.
biological control, parasites, *Trialeurodes vaporariorum* 7778.
biological control, parasites, *Trioxys complanatus*, *Therioaphis trifolii*, Australia, South Australia 3821.
biological control, parasitoids, habitat preferences, *Comptosia connata*, *Lymantia dispar* 8331.
biological control, parasitoids, *Lymantia dispar*, *Brachymeria lasus*, *Coccynomus disparis*, USA, Connecticut 8466.
biological control, parasitoids, reviews, *Insecta* 7665.
biological control, parasitoids, *Spodoptera littoralis*, Cyprus 2810.
biological control, pathogens, *baculovirus*, *Metarhizium anisopliae*, *Oryctes rhinoceros*, Western Samoa 5348.
biological control, pathogens, *Insecta* 8532.
biological control, pathogens, *Nosema locustae*, *Melanoplus sanguinipes* 3813.
biological control, pathogens, parasites, interaction, models 1455.
biological control, pathogens, *Phyllocoptruta oleivora*, *Hirsutiella thompsonii*, USA, Florida 4548.
biological control, pathogens, *Verticillium lecanii*, *Trialeurodes vaporariorum* 4623.
biological control, pools, *Dugesia tigrina*, *Culicidae*, USA, North Carolina 2927.
biological control, population dynamics, mathematical models, pathogens, *Insecta* 8452.
biological control, predation, *Solenopsis invicta*, *Anthonomus grandis* 2200.
biological control, predators, *Anthoxanthus nemorum*, *Phytomyza humuli* 2259.
biological control, predators, *Carabidae*, *Diabrotica* 6086.
biological control, predators, *Coccinellidae*, *Rhopalosiphum maidis*, *Zea mays* 5295.
biological control, predators, *Coccinellidae*, *Ternaspidoletus destructor*, New Hebrides 4576.
biological control, predators, *Formicidae*, *Laphygma exigua* 5368.
biological control, predators, *Megadiera lytra lyra*, *Insecta*, India 5214.
biological control, predators, pesticides effects on, *Phytoseiulus persimilis*, *Tetranychus urticae* 3766.
biological control, predators, *Solenopsis invicta*, *Nezara viridula* 3790.
biological control, reviews, *Nematoda*, *Insecta* 7666.
biological control, *Toxothrypanes rutilus rutilus* predators, *Aedes aegypti*, *Culex quinquefasciatus* 4579.
biological control, *Vespididae* parasitoids, *Diptera* 9322.
biological control, water pollution, effects on infection, *Lagenidium giganteum*, *Culex quinquefasciatus* 4513.
breeding sites recolonization, *Simulium damnosum*, Ivory Coast 5269.
buildings, repellents, *Formicidae* 5378
catching methods, *Tabanus lineola*, *Tabanus nigrovittatus*, USA, Massachusetts, Cape Cod 732
cattle, chemical control, *Simulium* 1359.
cattle, efficacy, insecticides, *Hypoderma lineatum* 2172.
cattle, ivermectin, *Musca autumnalis* 2173.
cattle, repellents, efficacy, *Simulium* 313.
chemical control, biological control, sex pheromone, *Anthonomus grandis* 5293.
chemical control, *Agrotis ipsilon*, India 5375.
chemical control, amidinohydrazone, efficacy, *Solenopsis invicta* 2193.
chemical control, *Atherigona soccata* 4569.
chemical control, *Atherigona soccata*, Thailand 4568.
chemical control, bait toxicity, *Formicidae* 2991.
chemical control, biological control, *Pantophytes*, New Guinea 2989.
chemical control, *Boophilus microplus* 6071.
chemical control, *Boophilus microplus* 6072.
chemical control, *Brevipalpus phoenicis*, Indonesia 5388.
chemical control, carbofuran, *Atherigona soccata* 5358.
chemical control, carbon disulfide, *Lepidoglyphus destructor*, *Triticum* 8515.
chemical control, chlorpyrifos, *Blattella germanica* 8507.
chemical control, *Chilo partellus*, *Zea mays* 5400.
chemical control, crop fields, *Cucurbita*, *Dacus cucurbitae* 7788.
chemical control, crop fields, *Elachrois*, *Cryptophymus*, *Ctenicera* 3829
chemical control, crop fields, *Epilachna varivestis*, *Glycine max*, USA, Maryland 3795.
chemical control, crop fields, *Heliothis armigera*, *Diparopsis watsoni*, Togo 2987.
chemical control, crop fields, *Psium sativum*, *Phytomyza atricornis* 6897.
chemical control, crop fields, yield, *Agrotis ipsilon*, India 7723.
chemical control, crop fields, *Zea mays*, *Agrotis ipsilon* 3881.
chemical control, crop protection, grasses, insecticides, *Heliothis armigera* 728.
chemical control, crop protection, *Insecta* 3709
chemical control, *Dendroctonus brevicornis*, *Pinus ponderosa* 8525
chemical control, efficacy, endosulfan, *Chilo partellus* 7758.
chemical control, efficacy, *Insecta*, USA, North Carolina 2982.
chemical control, *Eucalyptus*, *Isopora* 5374.
chemical control, fenvalerate, *Insecta* 5326
chemical control, fungicides, *Aphis fabae* 4627
chemical control, hematophagy, *Diptera* 3656
chemical control, hives, *Apis mellifera*, *Varrua jacobsoni* 4599
chemical control, houses, *Blattella germanica* 3789.

Pest control, (continued)

chemical control, Insecta, *Gossypium*, Nigeria 5399.
 chemical control, insecticides, *Amsacta moorei* 7685.
 chemical control, insecticides, *Brevicoryne brassicae* 7780.
 chemical control, insecticides, *Cosmopolites sordidus* 5377.
 chemical control, insecticides, *Dasyneura lini* 8451.
 chemical control, insecticides, *Diarris obliqua* 7702.
 chemical control, insecticides, efficiency, *Aphididae* 3742.
 chemical control, insecticides, *Holotricha serrata* 5376.
 chemical control, insecticides, horticulture, *Saissetia coffeae* 3792.
 chemical control, insecticides, larvae, *Malacosoma indicia*, India 1449.
 chemical control, insecticides, *Phytomyza atricornis*, *Etella zinckenella* 7711.
 chemical control, Lepidoptera, *Apium graveolens*, USA, California 9343.
 chemical control, life cycle, *Nilaparvata lugens* 4590.
 chemical control, *Listronotus oronogensis*, USA, Ohio 2973.
 chemical control, *Lycopersicon esculentum* crop fields, Insecta, New Caledonia 4558.
 chemical control, methyl parathion, toxicity, *Heliothis virescens* 4635.
 chemical control, pesticide resistance, *Tetranychus urticae*, British Isles 2980.
 chemical control, pesticides (organophosphorus), *Psylliodes tenebrosus* 7720.
 chemical control, pesticides, *Planococcus citri* 2189.
 chemical control, population dynamics effects on, models, *Malacosoma californicum* pluviale 1450.
 chemical control, stored products pests 8545.
 chemical control, toxicants, efficacy, *Solenopsis invicta* 2192.
 chemosterilants, Insecta 4575.
 chemosterilization, *Dysdercus cingulatus* 7451.
 chemosterilization, flight, sterility, spermatozoa transfer, *Anthonomus grandis* 2225.
 chemosterilization, sex pheromone, *Glossina morsitans* 5268.
 chemosterilization, tepa, thiopene, bempa, thiopene, *Dermatobia hominis* 5351.
 chemosterilization, topical application, *Scolytus multistriatus* 8234.
 clothing, feeding, permethrin, *Attageus megatoma*, *Anthrax flavipes*, *Tineola bisselliella* 3796.
 colonization, feeding behavior, biological control, *Coccinella septempunctata*, *Monella caryella*, *Mesochorus nigropunctatus*, *Melanocallis caryaeformis* 694.
 computer programs, modeling, Insecta 3016.
 control programs, environment management, wetlands, *Aedes sollicitans*, USA, Rhode Island, Barrington 5359.
 control programs, forests, Insecta, China 2216.
 control programs, *Sorghum*, *Atherigona soccata* 4556.
 control programs, suppression, populations, *Phytomyza atricornis*, *Phytomyza hominivorax* 8560.
 cosmophobes, *Boophilus*, *Boophilus annulatus* 8531.
 crop fields, abundance, *Ctenopseus obliqua*, *Epiphyas postvittana*, *Phanotrix excessans* 3816.
 crop fields, agricultural practices, arid zones, Insecta, India 5401.
 crop fields, books, Insecta, Indonesia 5543.
 crop fields, chemical control, insecticides, *Amrasca devastans* 4552.
 crop fields, damage, *Aphis fabae*, British Isles 3800.
 crop fields, damage, life cycle, *Diabrotica* 7715.
 crop fields, defoliation, simulation, Insecta, *Solanum tuberosum* 3814.
 crop fields, insecticides, *Athalia proxima*, *Lipaphis erysimi*, *Coccinella septempunctata* 7743.
 crop fields, mowing, *Heliothis* zea, *Heliothis virescens*, *Gossypium* 7713.
 crop fields, pesticide applications, Insecta 8551.
 crop fields, pesticide applications, methodology, *Ostrinia nubilalis* 9341.
 crop fields, sampling methodology 4629.
 crop fields, *Spodoptera litura*, *Brassica oleracea capitata* 8439.
 crop fields, yield, *Philaenus spumarius*, *Medicago sativa* 8561.
 crop production, Insecta, *Medicago sativa* 3015.
 crop protection, conferences, Insecta 3954.
 crop protection, environmental protection, population levels monitoring, Insecta 3714.
 crop protection, insecticides, monitoring, *Phasolus vulgaris*, Insecta, Nematoda 709.
 crop protection, *Manihot esculenta*, Insecta, India 4620.
 crop protection, pesticide applications, environmental protection, Insecta 3715.
 crop protection, pesticide resistance, Insecta 3713.
 crop rotation, *Microtermes obesi* 5373.
 cultivars, host plants resistance, *Medicago sativa*, *Acyrtosiphon kondoi*, *Acyrtosiphon pisum* 3801.
 cyhexatin, *Panonychus ulmi* 9300.
 damage, *Heliothis*, *Gossypium*, Australia, New South Wales 2988.
 damage, *Isopora*, India 3369.
 DDT, pesticide residues, *Isodes persulcatus*, USSR 9253.
 development, biological control, viruses 5392.
 diapause, emergence, pupae, genetics, hybrids, *Heliothis virescens*, *Heliothis subflexa* 347.
 diapause, life cycle, synchronization, seasons, *Diatraea grandiosella*, *Leptinotarsa decemlineata* 4446.
 diets, methoprene, *Autographa californica* nuclear polyhedrosis virus virulence, *Heliothis virescens* 6967.
 diflubenzuron, efficacy, *Anthonomus grandis* grandis 8519.
 diflubenzuron, efficacy, *Laspeyresia pomonella* 8562.
 disease resistance, pathogens, microorganisms, Insecta 7370.
 dispersal, atmospheric conditions, *Choristoneura fumiferana*, Canada, New Brunswick 705.
Earias vittella, *Heliothis armigera*, *Plutella xylostella*, *Apanteles plutellae*, *Leucinodes orbonalis*, *Adisura atkinsoni*, *Crociodoloma binotalis*, vegetables, *Bacillus thuringiensis* 1836.
 economics, *Heliothis armigera*, *Earias vittella*, *Pectinophora gossypiella*, Sri Lanka 6110.
 economics, *Phyllotreta*, *Brassica campestris* crop fields, Canada 8534.
 effects on crop yield, *Brassica napus*, *Delia brassicae*, *Myzus persicae* 3039.
 effects on crop yield, *Insecta*, *Cucurbita pepo* 4567.
 effects on soil fauna, community composition, distribution, orchards 7008.
 effects on *Sorghum*, *Schizaphis graminum* 727.
 effects on yield, *Empoasca fabae*, *Medicago sativa* 731.
 efficacy, *Andro* bai, *Solenopsis invicta* 9311.
 efficacy, livestock, *Ixodidae* 4524.
 efficacy, measuring techniques, eggs sampling, *Heliothis armigera* 1692.
 efficacy, polluted environments, ponds, *Bacillus thuringiensis israelensis*, *Culex* peus, *Culex pipiens* 8402.
 efficacy, repellents, *Diptera* 8961.
 efficacy, traps, *Glossina fuscipes quanzensis*, Congo, People's Rep. 9262.
 endosulfan, efficacy, *Lipaphis erysimi* 7736.

Pest control, (continued)

entomology, farm management, biological control, chemical control 686.
 environment management, developing countries, conferences, Insecta 3957.
 environment management, horticulture, Insecta 3726.
 environment management, Insecta, USA, California 3725.
 environment management, Insecta, USA, South Dakota 3758.
 environment management, mathematical models, cost-benefit analysis, statistical analysis 1585.
 environment management, planning, research programs, Insecta 3809.
 environment management, role, pheromones, Insecta 3797.
 environmental effects, emergence, *Dendroctonus rufipennis* 6960.
 environmental factors, cattle, *Amblyomma amencanum* 8583.
 environmental impact, population density, nuclear polyhedrosis virus, *Bacillus thuringiensis*, *Choristoneura occidentalis*, Canada, British Columbia 4589.
 environmental management, China 712.
 environmental management, host specificity, adaptation, Insecta, *Glycine max* 707.
 ethylene dibromide, forestry, *Dendroctonus ponderosus* 9342.
 extracts efficacy, *Acorus gramineus*, *Solanum xanthocarpum*, *Swertia chirayita*, 4583.
Bagrada cruciferarum 7682.
 feeding behavior, Insecta, *Tadarida aegyptiaca thomasi*, India 5221.
 fertilizer applications, crop fields, *Leucinodes orbonalis* 7707.
 field trials, attractants, chemical stimuli, visual stimuli, *Rhagoletis pomonella* 4583.
 food plants effects on development, fecundity, *Pterobelaus darlingtonis*, *Pterobelaus alternatus* 7510.
 forest management, cost-benefit analysis, *Lymantria dispar* 734.
 forest management, viruses, Insecta 1386.
 forestry, resource management, Insecta 9351.
 forestry, resource management, research programs, Insecta 5323.
 forests, *Enaphalodes rufus*, USA, Ohio 2209.
 forests, food plants, Insecta, *Pinus sylvestris*, *Pinus pallasiensis* 7690.
 forests, predators, *Aves*, *Operophtera brumata*, *Tortrix viridana* 3037.
 fruit trees, pesticide applications, methodology, Insecta 1423.
 fumigants, *Anastrepha suspensa* 3444.
 fumigants, effects on fecundity, pesticide resistance, phosphine, *Tribolium castaneum* 7692.
 fumigants, uptake, metabolism, phosphene, *Rhizopertha dominica* 1044.
 fumigation, ozone, vectors, bluetongue virus, *Culicoides varipennis* 4519.
 fumigation, soil, overwintering populations, *Leptinotarsa decemlineata* 2263.
 gammalin, *Phosphorus virescens*, Nigeria 3002.
 genetic control, cytoplasmic male sterility, translocation, *Culex quinquefasciatus* 6287.
 genetic control, failure, Y chromosome translocations, *Lucilia cuprina* 2348.
Glossina, reviews, Africa 6052.
 golf courses ponds, growth regulators, *Tanytarsus*, *Chironomus*, *Procladius* 8546.
 granulosis virus, effects on survival, parasitoids, *Apanteles glomeratus*, *Pieris rapae* 4190.
 greenhouses, predators, *Anthracinus pennsylvanicus*, *Trialeurodes vaporariorum* 7708.
 growth regulators, daminozide, host plants, population density, *Psylla pyricola* 688.
 growth regulators effects on reproduction, *Pissodes strobi* 3791.
 growth regulators, interference, endocrine system, juvenile hormones, Insecta 8447.
 growth regulators, susceptibility, developmental stages, *Choristoneura occidentalis* 9323.
 growth regulators, urea, Bay SIR-4514, *Tanytarsus*, *Chironomus*, *Procladius* 4601.
 harvesting, effects on population levels, *Agropyron desertorum*, *Lahops hesperius* 8512.
 heat tolerance, exposure, mortality, *Rhizopertha dominica*, *Sitophilus oryzae*, grasses, Australia 975.
 herbicides, toxicity, *Carabidae* 9021.
Hibiscus cannabinus, *Gadusa punctulicollis*, Sudan 2852.
 historical accounts, *Lymantria dispar*, USA, Michigan 7786.
 horticulture, urban environments, environment management, Insecta 3727.
 host plants damage, *Phigaea plumigera*, *Purshia tridentata*, USA, Utah 3025.
 host plants fatty acids effects on growth, *Pectinophora gossypiella*, *Heliothis virescens* 4414.
 host plants, oils, *Bruchus cheneis*, *Phasolus aureus* 6929.
 hydrogen peroxide, toxicity, larvae, *Aedes aegypti* 303.
 infectivity, *Laspeyresia pomonella* granulosis virus, *Rhyacionia frustrana* 9332.
 infestation,ivermectin, cattle, *Psoroptes communis* 7640.
 infestation, livestock, *Boophilus microplus*, Australia 2934.
 infestation, sheep, wool production, *Damia ovis* 6889.
 information, stored products, *Triticum*, *Sitophilus granarius* 7662.
 information centers, diagnosis, USA, Minnesota 3961.
 Insecta, microwave radiation, fumigation, botany specimens 2198.
 insecticides, *Aedes aegypti* 2919.
 insecticides, aerial applications, foliar applications, chemigation, crop protection 4581.
 insecticides, *Aphis nerii* 722.
 insecticides, *Bacillus thuringiensis*, cultivars, *Trichoplusia ni*, *Pieris rapae*, *Plutella xylostella* 1834.
 insecticides, carbonyl, toxicity, nymphs, *Nilaparvata lugens* 1847.
 insecticides, chlorfenapyr, *Delia brassicae* 2262.
 insecticides, comparative studies, *Epitrix cucumeris* 1426.
 insecticides, crop fields, *Sorghum bicolor*, *Chilo partellus* 7670.
 insecticides, decamethrin, traps, *Glossina tachinoides*, *Glossina palpalis gambiensis*, Ivory Coast, Leraba R. 4550.
 insecticides, decamethrin, *Glossina fuscipes quanzensis*, *Glossina palpalis palpalis*, Congo, People's Rep. 4547.
 insecticides, *Dendroctonus frontalis*, *Pinus* 8484.
 insecticides, diflubenzuron, efficacy, *Anthonomus grandis grandis* 4584.
 insecticides, diflubenzuron, *Muscidae* 5345.
 insecticides, effects on, pest outbreak, *Nilaparvata lugens* 307.
 insecticides efficacy, *Abelmoschus esculentus* host plants, *Aphis gossypii*, *Amrasca biguttula biguttula* 7683.
 insecticides, efficacy, aerosols, *Anopheles quadrimaculatus*, *Aedes taeniorhynchus* 8403.
 insecticides, efficacy, *Amrasca biguttula biguttula* 7756.
 insecticides, efficacy, *Atherigona soccata*, *Chilo partellus*, *Contarinia sorghicola* 5396.
 insecticides, efficacy, *Choristoneura occidentalis* 8542.
 insecticides, efficacy, *Heliothis virescens* 1474.
 insecticides, efficacy, *Oligonychus pratensis*, USA, Texas 1473.
 insecticides, efficacy, *Plutella xylostella*, *Pieris rapae*, *Trichoplusia ni* 3799.
 insecticides efficacy, *Sphegophorus callosus*, *Zea mays* 2250.

Pest control, (continued)

insecticides, efficacy, *Thaumetopoea pityocampa* 3833
 insecticides, *Glossina tachinoides*, *Glossina rajahis* 9251
 insecticides, *Gossypium*, crop protection, *Amaraca devastans*, *Aphis gossypii*
Heliothis armigera, *Bemisia tabaci*, Thailand 4622
 insecticides, *Heliothis*, USA, Mississippi 693
 insecticides, *Keiferia lycopersicella* 3755
 insecticides, *Leucodermis orbonalis*, *Salanum melongena* crop fields 7678
 insecticides, methomyl, mortality, eggs, larvae, *Heliothis punctiger*, *Heliothis armigera* 5380
 insecticides, *Musca domestica* 6894
 insecticides, *Oreoleia oryzae*, China, People's Rep. 1013
 insecticides, pathogens, *Anticarsia gemmatilis*, *Cesotoma trifurcata* 2236
 insecticides, penfluron, diflubenzuron, inhibition, sexual reproduction
Pectinotenus pictus 4619
 insecticides, permethrin, *Thyridopteryx ephemeraeformis* 2197
 insecticides, persistence, toxicity, *Trichogramma perkinsi*, *Trichogramma australicum* 3020
 insecticides, pesticide applications, *Aedes taeniorhynchus* 7677
 insecticides, pesticide applications, *Phyllonistis citrella* 7718
 insecticides, *Podagrica uniflora*, *Podagrica sjoestedti*, *Nigeria* 5402
 insecticides, population growth, *Nilaparvata lugens* 6162
 insecticides, roots, *Capsicum annuum*, *Insecta* 7695
 insecticides, seedlings, *Abies amabilis*, *Adelges piceae* 5302
 insecticides, soil moisture effects on toxicity, *Lachnosternus consanguineus* 5337
 insecticides, *Spodoptera litura* 5355
 insecticides, susceptibility, *Hypoborhenus hampei* 8199
 insecticides, synergism, toxicity, *Tribolium castaneum* 7405
 insecticides, temephos, *Simulium ornatum*, France, Neune R. Valley 4546
 insecticides, tepa, histopathology, oogenesis, *Culex pipiens fatigans* 1835
 insecticides, toxicity, *Aphis craccivora* 7417
 insecticides, toxicity, *Coccinella septempunctata*, *Brevicoryne brassicae* 7401
 insecticides, toxicity, *Holometia consanguinea* 7415
 insecticides, toxicity, mortality, *Pentalonia nigronervosa* 1843
 insecticides, toxicity, nontarget organisms, *Megachile rotundata* 4224
 insecticides, toxicity, *Phorodon buruli*, *Aphis fabae* 9028
 insecticides, toxicity, *Trypoxys inermis* 1848
 insecticides, traps, economics, *Glossinidae*, Ivory Coast 4549
 insecticides, *Tricium*, *Microtermes* etc 5371
 insecticides, yield, *Vigna unguiculata*, *Chalcidococcus aeneus* 8540
 insecticides, mosquito larvae, predation, *Aphanus dispar*, Saudi Arabia 563
 integrated control, *Albigena* 4570
 integrated control, crop fields, *Chilo partellus*, *Zea mays* 5406
 integrated control, crop fields, efficiency 4536
 integrated control, crop protection, environmental protection, *Insecta* 3712
 integrated control, economics, *Insecta* 3711
 integrated control, forests 4561
 integrated control, *Insecta*, *Gossypium* 9319
 integrated control, life cycle, host plants, *Rhyacionia frustrana*, USA, California 5318
 integrated control, orchards, *Malus pumila*, *Tetranychidae* 8517
 integrated control, overwintering populations, *Pectinophora gossypiella* 3021
 integrated control, sampling methodology 4533
 introduced species, *Lirionyma trifolii*, British Isles 6896
 irrigation effects on, *Malus domestica* 1385
 isomorphs, *Carabidae*, *Staphylinidae* 9320
 isosteryl alcohol, surface films, chemical control, efficacy, *Anopheles crucians*, mortality 6128
 isosteryl alcohol surface films, efficacy, *Culicidae* 8415
 juvenile hormones, endocrinology, precocenes, *Insecta* 8442
 juvenile hormones, instars, *Choristoneura occidentalis* 2954
 kairomones, effects on host searching behavior, *Trichogramma pretiosum*, *Heliothis zea* 423
 kaumones, prey, *Amblyseius fallacis*, *Phytoseulus macropilis* 2156
 larvae, antifedants, efficiency, *Diarsia obliqua* 1462
 larvae, *Simulium*, *Simulium*, *larvicides*, *Abate*, Guyana, Lethem, Burru R. 690
 Lepidoptera decemlineata, biological control, pathogens, *Bacillus thuringiensis* 1431
 life cycle, emergence, reproduction, *Hylemya antiqua* 6143
 life history, host plants, *Holotricha consanguinea*, India, Punjab 5363
 light traps, protection, methodology, *Culicidae*, USA, California 859
 livestock, hematophagy, *Stomoxys calcitrans*, *Tabanidae* 3743
 livestock infection, *Theileria* *sergenti*, *Babesia bigemina* 3682
 livestock, parasites, *Damalinia* *ovis*, *Linognathus pedalis*, *Linognathus ovillus*, Australia 3746
 Lycopersicon esculentum crop fields, pathogens, *Bacillus thuringiensis*, *Lacanobia oleracea* 5300
 Lymantria dispar, pathogenicity, nuclear polyhedrosis virus 8145
 Lymantria dispar, review, USA, California 6905
 Macrosteles fascifrons, infestation, cultivars, *Larica*, aluminum mulches 2253
 management, *Anopheles pulcherrimus*, *Anopheles hyrcanus*, Afghanistan 9241
 management, control programs, computer applications, microprocessor software system 8564
 mapping, damage, *Dendroctonus frontalis*, USA, Texas 9317
 mathematical models, damage estimation, crop protection, *Phyllocoptruta oleivora* 1400
 mathematical models, spatial distribution, traps, detection, *Anthonomus grandis* 2242
 mating behavior disruption, *Heliothis virescens* 3763
 mating behavior disruption, pheromone traps, *Amyelois transitella* 8507
 mating behavior disruption, synthetic sex pheromone, *Eucosma sonomana* 8584
 mating behavior disruption, (Z, Z)-11, 13-Hexadecadienal 2219
 mating types, heterozygotes, fertility, genetics, translocations, *Musca domestica* 2328
 methodology, *Blattella* 9288
 methodology, explosives, *Pinus contorta*, *Dendroctonus ponderosae* 5303
 methodology, toxicity testing, *Bacillus thuringiensis israelensis*, *Culex pipiens* 8119
 methoprene, juvenile hormones analogs, *Lesioderma serricorne*, *Ephestia elutella* 8579
 molting inhibition, *Insecta* 9287
 molting inhibitors, azadirachtin, *Lepidoptera* 9333
 molting inhibitors, toxicity, *Choristoneura occidentalis* 9031
 monitoring, population levels, *Psila rosae* 3009
 mortality, susceptibility, infection, *Vairimorpha necatrix*, *Lepidoptera* 2965
 Musca domestica, *Stomoxys calcitrans*, *Fannia canicularis*, *Drosophilidae*, Germany,

Pest control, (continued)

Myd Rep 632
 xenomatoses vectors, *Spilopsyllus cuniculi*, *Oryctolagus cuniculus*, Australia, New South Wales, Urama 762
 Nomuraea rileyi infection, *Heliothis zea* 9134
 nontarget organisms, *Cochliomyia hominivorax*, *Diptera*, USA, Southwest 2206
 nuclear polyhedrosis virus, *Agrotis ipsilon*, *Zea mays* 8454
 nuclear polyhedrosis virus infection, mortality, *Diarsia obliqua* 7389
 nuclear polyhedrosis virus, pathogenicity, *Lymantria dispar* 8145
 nuclear polyhedrosis virus, safety, public health, *Manestra brassicae* 7717
 nuclear polyhedrosis virus, transmission, *Podus maculiventris*, *Tnchoplusia ni* 3811
 oils, crop fields, *Callosobruchus chinensis* 2251
 oils, viruses, vectors, crop fields, *Aphididae* 7697
 orchards, toxicity tests, pesticides, *Amblyseius hibens* 2664
 ornamental plants, natural enemies, *Pulvinaria mesembryanthemum*, *Pulvinaria deltoidea*, USA, California 9316
 parasites, *Ceroplastes cirripediformis*, USA, Texas 6116
 parasites, *Chrysotoxigena*, *Lirionyma sauvae*, *Lirionyma trifolii*, USA, Texas 4600
 parasites, *Encarsia formosa*, *Tnleurodes vaporariorum* 7726
 parasites, longevity, fecundity, *Bracon hebetor*, *Ephestia cautella* 2025
 parasites, population dynamics, *Spalangia odora*, *Musca domestica* 6903
 parasites, population levels, *Alouacanthus woglumi*, USA, Florida 2946
 parasites, *Prospaltella permiciosa*, *Quadrastipoda permiciosa*, Greece 2956
 parasitoids, *Aphididae* 6769
 parasitoids, *Nilaparvata lugens*, *Sogatella furcifera* 9136
 parasitoids, urban environment, *Rhopomyia californica*, USA, California 4572
 pathogenicity, *Bacillus thuringiensis*, *Culicidae* 8995
 pathogenicity, *Bacillus thuringiensis*, *Culicidae* 8997
 pathogenicity, environmental effects, *Bacillus thuringiensis*, *Culex pipiens*, *Aedes aegypti* 8996
 pathogenicity, *Nomuraea rileyi*, *Heliothis virescens* 9006
 pathogenicity, soil characteristics effects on, formulations, *Bacillus thuringiensis israelensis*, *Culicidae* 7671
 pathogens, adjuvants, efficacy, *Trichoplusia ni*, *Heliothis zea* 8457
 pathogens, baculovirus, *Glycine max* crop fields, *Pseudoplusia includens* 6138
 pathogens, baiting, *Glyridae* 1398
 pathogens, efficacy, *Aphis fabae*, *Entomophthoraceae* 3038
 pathogens, exotoxins, *Bacillus thuringiensis*, *Epilachna varivestis* 4598
 pathogens, infectivity, *Microsporida*, *Aedes aegypti* 8127
 pathogens, susceptibility, *Feltia subterranea*, *Spodoptera frugiperda*, *Heliothis zea* 9011
 pathogens, transmission (transovarial), *Vairimorpha necatrix*, *Nosema pyrausta*, *Lepidoptera* 8125
 pathology, *Bacillus thuringiensis*, *Lepidoptera* 997
 Persea fruit, *Insecta* 1454
 Persea plantations, natural enemies, *Pseudococcus longispinus* 2945
 pest outbreaks, *Ceratitis capitata*, USA, Florida 3745
 pest outbreaks, *Lirionyma trifolii* 6205
 pest outbreaks, *Mononychellus tanajoa*, *phenacoccus manihoti*, *Nigeria* 1416
 pest outbreaks, new records, *Trogoderma granarium*, USA 3768
 pest outbreaks, population dynamics, mathematical models, *Choristoneura fumiferana* 6904
 pest outbreaks, *Scarabaeidae*, India, Maharashtra 5362
 pest resistance, *Chilo partellus*, *Zea mays* 5393
 pest resistance, host plants, *Ipomoea batatas*, *Phyllophaga* *epilida* 6936
 pest resistance, host plants, *Oligonychus pratensis*, *Sorghum bicolor* 8549
 pesticide applications, aerial applications, *Phyllocoptruta oleivora*, USA, Florida 3747
 pesticide applications, equipment, aquatic environment, *Culicidae* 8848
 pesticide applications equipment, *Culicidae* 2481
 pesticide applications, freezing stress, fruit trees, *Insecta* 1427
 pesticide applications, methodology, controlled conditions, biodegradability, cellophane bags 4621
 pesticide applications, spatial distribution effects on, *Bathycioleia thalassina* 581
 pesticide resistance, *Haemaphysa irritans* *exigua*, Australia 3430
 pesticide resistance, *Insecta* 9437
 pesticide resistance, *Nilaparvata lugens* 8190
 pesticide resistance, orchards, reviews, *Malus*, *Insecta* 7727
 pesticide resistance, selection, *Amblyseius fallacis* 5794
 pesticide resistance, selection, *Hylemya antiqua* 8665
 pesticides, efficiency, *Trialeurodes vaporariorum* 9291
 pesticides, *Insecta*, *Abelmoschus esculentus* 7706
 pesticides (organophosphorus), toxicity, *Culex pipiens pipiens* 9027
 pesticides, toxicity, *Coleophora larcella* 5782
 pesticides, toxicity, predators, *Tryphlodromus pyralis*, prey, *Panonychus ulmi*, *Malus* 6498
 pesticides, toxicity, synergism, *Spodoptera litoralis* 7400
 pests abundance, *Aceria litchii*, India, Bihar 7698
 Petrova albicapitata, distribution 2057
 pheromone traps, *Agrotis ipsilon* 6938
 pheromone traps, efficacy, *Heliothis zea* 1475
 pheromone traps, efficacy, spatial distribution effects on, *Trypandendron* 9302
 pheromone traps, factors affecting efficacy, *Cydia pomonella* 5347
 pheromone traps, fruit trees, *Insecta* 2992
 pheromone traps, population dynamics, *Prays citri*, Israel 4594
 pheromone traps, research programs, *Agrotis ipsilon*, USA 8574
 pheromone traps, socio-economic aspects, *Spodoptera litoralis*, Egypt, Arab Rep. 8498
 pheromone traps, synthetic sex pheromone, *Homona magnanima* 3026
 pheromones, crops, status 1453
 pheromones inhibitors, trees, *Dendroctonus frontalis*, *Ips avulsus* 3788
 pheromones, *Insecta* 3710
 phosphine fumigation effects on, stored products, *Insecta* 2241
 plantations, damage, *Odonotermes gurdaspurensis*, *Odonotermes obesus*, Eucalyptus, India 7700
 plantations, parasites, *Lophoga diastraea*, *Diatraea saccharalis*, USA, Louisiana 2957
 population density, pheromones concentration, effects on mating, *Heliothis zea* 4610
 population dynamics, biogeography 5305
 population dynamics, sterile-release efficacy, models 5341

Pest control, (continued)

- population regulation, Parus, Insecta, Turkey 619.
poultry farms, attractants efficiency, Diptera 4639.
procectone II, topical application effects on attractancy, *Ceratitis capitata* 8099.
predation, Phytoseiulus macropilis, Phytoseiulus persimilis, Tetranychus urticae 2205.
predation, Psylla pyricola, Aves 9334.
predators, crop fields, Anticarsia gemmatilis, Glycine max 6148.
predators effects on, Chermes climacoides, Phytoseiulus persimilis 1265.
predators, Eriophyidae, leaf-curl association, India, West Bengal 9299.
predators, habitat effects on dispersal, Pardosa 4427.
predators, Hemipteroseus indicus, Dysdercus koenigii 2972.
predators, insecticides, Delia brassicae 2210.
predators, Musca domestica, Acrodactylus gingivianus, India 7681.
predators, Musca vetustissima, Arthropoda, Australia 2880.
predators, Phytoseiulus persimilis, Tetranychus urticae, British Isles 3023.
predators, stored products, Ephestia cautella, Blatiscoccus tarsalis 2955.
predators surveys, Nezara viridula 607.
processed foods, nutrition, Tribolium confusum 8078.
rangelands, ecosystem analysis, reviews, Insecta 6212.
repellents, aerosols, efficacy, Arthropoda 8965.
repellents, clothing, Arthropoda 8962.
repellents, diethyltoluamide, ethyl hexanediol, Diamanus montanus 6887.
repellents, Dysdercus koenigii 7346.
repellents, thiamine, Canis familiaris, Siphonophora 7636.
repopulation, pesticide applications, Nilaparvata lugens 6122.
research programs, U.S. Department of Agriculture, evaluation methodology, USA 7923.
research programs, crops, Acrididae, West Africa 681.
resting behavior, habitat preferences effects on, Glossina palpalis, Mali 436.
role, mating behavior, mate selection, Lepidoptera 4285.
role, population dynamics models, Insecta 4455.
sampling methodology, statistical analysis, crop fields, Tetranychus urticae, Mentha piperita 8505.
Scotolys multistriatus, parasites, Dendrosoter protuberans, Entedon leucogramma 2017.
sex pheromone application, meteorology, Pectinophora gossypiella 4596.
sex pheromone, attractancy, Phthorimaea operculella 6140.
sex pheromone, attractancy, Sitophilus oryzae 7333.
sex pheromone, dose, Rhyacionia frustana 214.
sex pheromone effects on mating behavior disruption, Dermacerator variabilis 1907.
sex pheromone, females tethering, methodology, Choristoneura fumiferana 5291.
sex pheromone, inhibitors, methodology, females, Diaporis castanea 1465.
sex pheromone, mating behavior disruption, Anthonomus grandis 9325.
sex pheromone, Platypila carduivoluta 2187.
sex pheromone, traps, efficacy, Euxoa ochrogaster 742.
silica dust, environmental effects, Ceratophylus fasciatus 9255.
soil temperature, effects on mortality, reproduction, Pectinophora gossypiella 6167.
sound effects on movements, Heliothis armigera 9081.
sterile-release, Ephestia cautella 8232.
sterile-release, mating behavior frequency, Hylemyia antiqua 8249.
sterile-release, selection, survival, Anthonomus grandis 3718.
sterilization, y radiation, Caryaedon serratus 7449.
sterilization, diet, radiation, Anthonomus grandis 3486.
stored products, air flow, Glycophagus destructor, Acanthosiro, Tyrophagus putrescentiae, Oryzaephilus surinamensis, Tribolium castaneum, Sitophilus granarius 6092.
stored products, antifedants, repellents, Rhyzopertha dominica, Tribolium castaneum 7729.
stored products, carbon dioxide, Insecta 1403.
stored products, chemical control, insecticides, Insecta 2190.
stored products, grains, Insecta, Malawi 6968.
stored products, growth regulators, Coleoptera 3787.
stored products, heat treatments, Rhyzopertha dominica, Sitophilus oryzae 2251.
stored products, Insecta 2984.
stored products, insecticides, Callosobruchus maculatus, Callosobruchus chinensis 7669.
stored products, insecticides persistence, Callosobruchus chinensis 7770.
stored products, insecticides, Sitophilus granarius, Tribolium confusum, Rhyzopertha dominica 7768.
stored products, juvenile hormones analogs, Insecta 2258.
stored products, juvenile hormones analogs, Tribolium castaneum 2239.
stored products, methodology, microwave radiation, Rhyzopertha dominica, Sitophilus oryzae 3793.
stored products, microwave radiation, Insecta 3784.
stored products, pirimiphos methyl, efficacy, Insecta 676.
stored products, Pyralidae, Gelechiidae, Greece 7663.
stored products, temperature, Rhyzopertha dominica, Sitophilus oryzae 6928.
suppression, mating, oviposition, sex pheromone, air permeation technique, Spodoptera frugiperda, Heliothis zea 4624.
surfactants, Aedes taeniorhynchus, USA, Florida 674.
synthetic pheromones, dispersion, efficacy 2203.
synthetic sex pheromone, dose, Cydia nigricana 696.
synthetic sex pheromone efficacy, Spodoptera exigua, Homoeosoma electellum 2201.
temperature effects, dose dependency, mortality, Rhyzopertha dominica 237.
Thymelicus lineola, host-parasite interactions, Zophobora radicans, Entomophthora egressa 3420.
toxicity, Bacillus thuringiensis thuringiensis, Bacillus thuringiensis kurstaki, Achea janata 7384.
toxicity, bacteria, Simulium 9013.
toxicity, formulations, Bacillus thuringiensis, Anopheles arabiensis 8121.
toxicity, insecticides, Anereus fasciculatus 8204.
toxicity, insecticides, Diabrotica virgifera virgifera, Diabrotica undecimpunctata howardi 8194.
toxicity, insecticides, Sitophilus granarius 9297.
toxicity, rose bengal, erythrosin B, Musca autumnalis 2233.
toxicity testing, insecticides, Diabrotica undecimpunctata undecimpunctata 8189.
traps, aromatic compounds, attractancy, Macroductylus subspinosus 8487.
traps, efficacy, Anastrepha ludens 4628.
traps, efficacy, Blatiella germanica 3532.
traps efficacy, visual stimuli, Liriomyza sativae, Liriomyza trifolii 2195.
tropical environment, reviews 7724.
use, predators, diets, Peucea viridans 9122.
vectors, disease transmission, habitat alterations, salt marshes, Culicidae, USA,

Pest control, (continued)

- Georgia, Glynn Co 1437.
vegetables, chemical control, larvae, Lepidoptera 3744.
water management, reservoirs, Culicidae, USA, Tennessee 2935.
weed control effects on, horticulture, Insecta 3728.
weed control, environment management, horticulture, Insecta 3958.
wheat, pest resistance, Mayetula destructor 661.
wood, alkylammonium derivatives, Reticulitermes 3587.
Pest management,
crop fields, sampling methodology, Arthropoda 3237.
Pest outbreaks,
biological control, parasites, Aleurocanthus woglumi, USA, Florida 1420.
biological control, parasites, Lepomastix dactylopi, Phanoecoccus citri 6715.
biological control, parasites, Neocleptana carposae, Pronoxystus robinae 733.
biological control, parasitoids, Zeiraphera diniana, Switzerland 7546.
biological control, population regulation, modicellae, Zeiraphera hesperiana, Choristoneura occidentalis, Doryctera reticuloides, Zeiraphera hesperiana, Neomatocampa filamentaria, Griseola radiolana, Acleris glomerana, USA, Idaho 9305.
Citrus sinensis fruit trees, seasonal variations, Anareus fasciculatus, USA, Florida 4541.
climate effects on, forests, Dendroctonus frontalis 2961.
climate, mathematical models, Agrostis segetum, Denmark 5412.
crop fields, damage, Mythimna separata, Secale cereale, India 6925.
crop fields, Dendroctonus ephraim, India 5315.
crop fields, Saccharum officinale, Scarabaeidae, India 5361.
damage, crop fields, Bemisia tabaci, Trialeurodes abutilonea, Aleyrodes spiraecoides, USA, California 9290.
damage, crop fields, odontomeres, India, Punjab 5370.
damage, crops, Oriza sativa, Decladococcus indica, Trirapa 7796.
damage, Gossypium, Maconellicoccus, India 7733.
damage, host plants, Atropis canescens, Tenebrio nox, USA, Arizona 6795.
defoliation, Lymantria dispar, USA, New Jersey 4542.
detection, pheromone traps, control programs, Heliothis armigera 6183.
environmental effects, Aedes sollicitans, USA, Texas, Brazoria Co 4523.
epidemiology, population dynamics, Metopolophium dirhodum, Sitobion avenae, Triticum 4383.
factors affecting population decline, parasites, viruses, Mythimna separata, India 5301.
flight activity, phenology, Rhopalosiphum padi, Sitobion avenae, Metopolophium dirhodum 6826.
fruit trees, Ceratitis capitata, USA, California 3014.
habitation, host plants, Macrostiphum albifrons, Lupinus, British Isles, England, New Gardens 7344.
insecticides, effects on, Nilaparvata lugens 307.
Lepidoptera decemlineata, British Isles 8098.
life tables, crop fields, Saccharum officinale, Mogannia minuta, Okinawa 6109.
Lymantria dispar, reviews, USA, California 6905.
morphology, taxonomic, Palynura scuti, Mauritius 3800.
new records, Dendroctonus ephraim, India, Kashmir 4000.
new records, Dysdercus clathratus, India, Meghalaya 7691.
new records, Mononychellus tanajou, India, Meghalaya 7771.
new records, pest control, Tropodroma granarium, USA 3768.
new records, Podium guajava, Metastasis recta, India, Punjab 7738.
new records, Stenochroa elongata, Zea mays, India, Meghalaya 7689.
orchards, damage, Amyelois transitella, Prunus vera 6105.
orchards, leaves damage, Phylloxera cactagella, USA, Connecticut 3024.
orchards, Pseudococcus maritimus, Pyrus communis, USA, Washington 8498.
Oryctes nasicornis, Sweden 4539.
parasites, cattle, Psoroptes, USA 5281.
pest control, Ceratitis capitata, USA, Florida 3745.
pest control, Liriomyza trifolii 6205.
pest control, Mononychellus tanajou, phenacoccus manihoti, Nigeria 1416.
pest control, Scarabaeidae, India, Maharashtra 5362.
pollution effects, pest control, insecticides, temephos, Simulium ornatum, France, Neune R. Valley 4546.
population dynamics, Dasychira argentea, Japan 3723.
population dynamics, environmental factors, Helicoverpa armigera, India, Jabalpur 7769.
population dynamics, mathematical models, Choristoneura fumiferana 3802.
population dynamics, mathematical models, Choristoneura fumiferana 6904.
population dynamics, mathematical models, Dendroctonus frontalis, USA 3644.
population regulation, environmental effects, Costelya zealandica, Heteromyces arator, New Zealand 6911.
seasonal variations, damage, Citrus, Anareus fasciculatus, USA, Florida 4613.
seasonal variations, environmental factors, Spodoptera exempta, Africa 579.
species composition, Choristoneura occidentalis, Doryctera reticuloides, Zeiraphera hesperiana, Neomatocampa filamentaria, Griseola radiolana, Acleris glomerana, USA, Idaho 5889.
species composition, Tetranychus urticae, Modicogryllus, Velarifictorus, Cryolophus, India, Meghalaya 7694.
Pest resistance,
allergists, mice, Polypala serrata 5275.
antibiotics, Gossypium extracts, effects on development, Earias vitella 6146.
biocumulation, 6-methoxybenzoxazolinone, methodology, Zea mays, Ostrinia nubilalis 8851.
biochemistry, Sorghum bicolor, Insecta 4564.
biological control, salivary gland antigens, Dermacerator andersoni 6058.
breeding, crops, Insecta 4531.
breeding, genetic factors, Fragaria ananassa, Tetranychus urticae 554.
breeding, host plants, Triticum, Sitaphis graminum 3717.
characterization, Sorghum bicolor, Oligonchys pratensis 4588.
clones, host plants, Malus domestica, Panonychus ulmi 5312.
comparison, Lepidoptera decemlineata, Solanum berthaultii, Solanum tuberosum 8548.
crop fields, Leguminosae, Graphognathus leucoloma, New Zealand, North I. 9307.
crops, Digitaria, Sipha flava 4607.
crops, Graphognathus leucoloma, Leguminosae, New Zealand, North I. 5415.
crops, heritability, Pennisetum americanum, Blissus leucophaea 4638.
crops, varieties, Sorghum vulgare, Chilo partellus 7784.
cultivars, Insecta, Glycine max 6942.
cultivars, Insecta, Vigna unguiculata 8522.
cultivars, Lissorhopus oryophilus, Oryza sativa 6129.
cultivars, Lissorhopus oryophilus, Oryza sativa 6129.
cultivars, Phaeosolus vulgaris, Zabrotes subfasciatus 8578.
cultivars, Phthorimaea operculella, Solanum tuberosum 539.

Pest resistance, (continued)

cultivars, *Myzus persicae* 4633.
 cultivars, *Sorghum*, *Atherigona soccata* 4565
 cultivars, *Triticum*, *Sitobion avenae*, *Metopolophium 8567*
Digitaria, *Sipha flava* 9348
 effects on population dynamics, oviposition, development, *Solanum berthaultii*,
Leptinotarsa decemlineata 4407
 Eucalyptus wood, *Nasutitermes exitiosus* 4527
 feeding behavior, *Zea mays*, *Heliothis zea* 9318
 feeding tolerance, *Poa pratensis*, *Blissus leucopertus* 1399
 galls, breeding, *Oryza sativa*, *Oreolira oryzae* 5407
 genes, *Venturia inaequalis*, *Panonychus ulmi* susceptibility, *Malus* 6204
 genetic analysis, host plants, *Nilaparvata lugens*, *Oryza sativa*, Japan 8462
 genotypes, *Euleius coracana*, *Sesamia inferens*, *Myllocerus maculatus* 5408.
 germplasm, *Zea mays*, *Atherigona* 7688
 histamine, attachment sites, guinea-pigs, *Dermacentor andersoni* 6069
 horticulture, *Impatiens*, *Tetranychus urticae* 5199
 host plants, *anthobius*, *Medicago sativa*, *Therionaphis trifoli* 7774
 host plants, *anthobius*, *Sorghum vulgare*, *Atherigona soccata* 7751
 host plants, *Avena sativa*, *Schizaphis graminum* 9314.
 host plants, *Beta vulgaris*, *Tetanops myopaeformis* 9350
 host plants, biochemical characteristics, *Sorghum bicolor*, *Atherigona soccata*
 7740
 host plants, damage, *Acyrtosiphon*, *Medicago sativa* 2256.
 host plants, damage, *Empoasca kraemeri*, *Phaeolus lunatus* 8459
 host plants, detection methodology, *Ipomoea batatas*, *Diabrotica balteata* 3719
 host plants, detection methodology, *Malus*, *Enosoma lanigerum* 2962
 host plants, developmental stages, *Zea mays*, *Ostrinia nubilalis*, *Agrotis ipsilon*
 6914.
 host plants, diets, damage, *Ostrinia nubilalis*, *Zea mays* 3780.
 host plants, effects on development, *Triticum aestivum*, *Metopolophium dirhodum*
 2840
 host plants, effects on feeding behavior, *Heliothis zea*, *Zea mays* 2044.
 host plants, effects on growth, development, *Heliothis virescens*, *Gossypium* 6191.
 host plants, effects on population levels, *Zea mays*, *Spodoptera frugiperda* 5395.
 host plants, *Empoasca abrupta* 2090.
 host plants, environmental stress, *Medicago sativa*, *Therionaphis maculata* 9168
 host plants, extracts, *Vigna mungo*, *Leucobrychus chinensis*
 7766.
 host plants, feeding behavior, *Schizaphis graminum*, *Sorghum bicolor* 6096
 host plants, feeding deterrents, *Sorghum bicolor*, *Schizaphis graminum* 5294
 host plants, fungi, *Dendroctonus ponderosae*, *Pinus contorta latifolia* 6186
 host plants, genetics, *Abelmusichus excrucians*, *Amarca biguttata biguttata* 6934
 host plants, genotypes, *Sorghum*, *Schizaphis graminum* 6153
 host plants, genotypes, *Zea mays*, *Spodoptera endemia* 8518
 host plants, *Glycine max*, *Nezara viridula* 9353
 host plants, *Gossypium arboreum*, *Earias*, *Pectinophora gossypiella* 8441.
 host plants, *Gossypium hirsutum*, *Heliothis virescens* 9352.
 host plants, herbivory, *Atherigona* 4566
 host plants, infestation methodology, *Heliothis virescens*, *Gossypium hirsutum*
 8868
 host plants, inheritance, genetic factors, *Pennisetum americanum*, *Blissus*
leucopertus leucopertus 8460.
 host plants, *Ipomoea batatas*, *Cylas formicarius elegantulus* 6916.
 host plants, larvae enzymes, digestive tract, *Atherigona soccata* 4153.
 host plants, larvae survival, *Sitona* 6902
 host plants, lipids, deterrents, *Sorghum bicolor*, *Locusta migratoria*
migratoriosa 5290.
 host plants, *Lolium perenne*, *Hyperodes bonariensis* 6799
 host plants, methodology, *Nilaparvata lugens*, *Zea mays* 8537.
 host plants, *Oligonychus pratensis*, *Sorghum bicolor* 8549
 host plants, *Oryza sativa*, *Nephotettix cincticeps* 3004.
 host plants, *Oryza sativa*, *Nephotettix cincticeps* 3589.
 host plants, *Oryza sativa*, *Nilaparvata lugens* 5381.
 host plants, parasitoids toxins, *Hyposoter exiguae*, *Heliothis zea* 3578.
 host plants, *Psylla pyricola*, *Pyrus ussuriensis* × *Pyrus communis* 3720.
 host plants, *Schizaphis graminum*, *Avena* 2835
 host plants, screening, *Vigna radiata*, *Manuca testalis* 3721
 host plants, *Sitobion avenae*, *Triticum aestivum* 2986
 host plants, *Spodoptera frugiperda*, *Eremochloa ophioides* 8539.
 host plants, susceptibility, *Brassicaceae*, *Brevicoryne brassicae* 9301.
 host plants, varieties, *hybrids*, *Blissus insularis*, *Stenophthrum secundatum* 8556.
 host plants, varieties, *Leucinodes orbonalis*, *Solanum melongena* 7676
 host plants, varieties, *Sorghum bicolor*, *Zea mays*, *Chilo partellus* 7732
 host plants, *Vitis*, *Daktulosphaira vinifoliae* 9289
 host plants, water stress effects on, *Medicago sativa*, *Therionaphis maculata* 5324
 host plants, yield, *Nilaparvata lugens*, *Oryza sativa* 6197
 host plants, *Zea mays*, *Tribolium castaneum* 6931.
 hosts, infestation, guinea-pigs, *Dermacentor andersoni* 5272
 hybrids, *Zea mays*, *Pyrideres rileyi* 3716.
 immune response, cattle, *Synoderma lineatum* 6882
 indicators, 6-methoxybenzoxazolinone, *Zea mays*, *Ostrinia nubilalis* 6099
 infestation damage, *Zea mays*, *Diabrotica virgifera* 6117.
 infestation, host plants, *Sitophilus oryzae*, *Hordeum vulgare* 7742.
 infestation, skin sensitization antibodies, *Sylvilagus floridanus*, *Haemaphysalis*
leporispalustris, *Dermacentor variabilis* 5276.
 inheritance, *Nilaparvata lugens*, *Oryza sativa* 5404.
 measuring techniques, roots damage, *Zea mays*, *Diabrotica virgifera virgifera*
 6915.
 mechanisms, host plants, *Trialeurodes vaporariorum*, *Lycopersicon hirsutum*,
Solanum pennellii 9283.
 pest control, *Chilo partellus*, *Zea mays* 5393.
 pest control, *Ipomoea batatas*, *Phylloneta ephitida* 6936
 phasaelous lunate, *Empoasca kraemeri* 4592.
 photoperiod, light intensity effect on, *Lycopersicon hirsutum*, *Manduca sexta*
 9340.
 plant breeding, varieties, *Oryza sativa*, *Oreolira oryzae* 522.
 screening, *Phthorimaea operculella*, *Solanum tuberosum* 3824.
 seedlings, morphology role, *Sorghum bicolor*, *Atherigona varia soccata* 7719
 seeds infestation, measuring techniques, *Pisum sativum*, *Bruchus pisorum* 8530
 selection, *Nilaparvata lugens*, *Oryza sativa* 6199.
 sterols, biochemical analysis, susceptibility, *Insecta*, *Glycine max* 535
 stored products containers, *Insecta* 9337.
 Triticum crop fields, biotypes, *Schizaphis graminum*, *USA*, Texas 3761.
 turnip mosaic virus infection effects on, *Brassica rapa*, *Myzus persicae*.
Brevicoryne brassicae 3830.

Pest resistance, (continued)

varieties, genetic analysis, *Oryza sativa*, *Sogatella furcifera* 9280.
 vegetables, crop protection, *Insecta* 3017.
 wheat, *Mayetiola destructor* 661.
 Pesticide applications,
 aerial applications, *Phyllocoptruta demolea*, *USA*, Florida 3747.
 amoncarb, pollution effects, activity, forests, *Arthropoda* 9212.
 chemical control, crop fields, *Insecta* 8551
 chemical control, electrostatic sprayer, crop fields, *Insecta* 8486.
 chemical control methodology, *Cochliomyia hominivorax* 678.
 crop fields, toxicity, *Apis mellifera*, *Zea mays* 6202.
 dipping, insecticides, coumaphos, cattle 8433.
 dosage, bioassays, insecticides, pesticide applications 4615.
 dose-response effects, enzyme polymorphism, larvae, *Choristoneura occidentalis*
 4229
 effects on population levels, abundance, *Sitobion avenae* 3724.
 effects on yield, damage, *Mythimna separata*, *Zea mays* 2255.
 environmental protection, pest control, crop protection, *Insecta* 3715.
 equipment, aquatic environment, *Culicidae* 8848.
 equipment, pest control, *Culicidae* 2481.
 foraging behavior, diurnal variations, *Apis mellifera*, *Zea mays* 5923.
 fruit trees, freezing stress, *Insecta* 1427.
 insecticides, particle size, chemical control, *Simulium* 6185.
 insecticides, pest control, *Phyllocnistis citrella* 7718.
 methodology, controlled conditions, biodegradability, cellophane bags 4621.
 methodology, pest control, crop fields, *Ostrinia nubilalis* 9341.
 mortality, apiculture, *Apis mellifera* 6937
 pest control, *Dendroctonus frontalis*, *Pinus* 8484.
 pest control, fruit trees, methodology, *Insecta* 1423.
 pest control, insecticides, *Aedes taeniorhynchus* 7677.
 pest control, spatial distribution effects on, *Bathycocilia thalassina* 581.
 repopulation, pest control, *Nilaparvata lugens* 6122.
 spraying, livestock, *Sus scrofa*, *Mallophaga*, *Anopliura*, *Psoroptidae* 8429.
 Pesticide residues,
 carbaryl, *Cicer arietinum*, chemical control, *Helicoverpa armigera* 7773.
 effects on nontarget organisms, soil, *Musca domestica* 2656.
 host plants pollen, nontarget organisms, *Megachile rotundata*, *Medicago sativa*
 8395.
 insecticides, contamination, pollinators, *Megachile rotundata* 4317.
 insecticides, methomyl, *Cynodon dactylon* 5416.
 insecticides, parathion, toxicity, effects on, *Apis mellifera*, cells, chemical
 analysis 298.
 insecticides, permethrin, fenvalerate, measuring techniques, chromatography, GLC,
Acrididae, *Anas* 1833.
 insecticides, toxicity, pollution effects, *Conophthorus monticola* 296.
 mephosfolan, toxicity, soil, *Zea mays* 7709.
 monocotrophs, insecticides, toxicity, *Pusa fulgura*, pest control, *Amarca*
biguttata biguttata 2653.
 pest control, DDT, *Isode persulcatas*, USSR 9253.
 phosphate, soil, degradation, temperature, bioassays, *Drosophila melanogaster* 7402.
 soil, effects on larvae, *Diabrotica longicornis*, *Diabrotica virgifera* 3740.
 toxicity, insecticides, systems, *Aphis gossypii* 7413.
 toxicity, nontarget organisms, natural enemies, *Planococcus citri* 5800.
 Pesticide resistance,
 aryl carbamate, insecticides, inheritance, genetic factors, *Metaseilus*
occidentalis 8651
 azinphosmethyl, selection, *Amblyseius fallacis*, *Tetranychus urticae* 3128.
 binopacryl, tetradifon, genetic analysis, *Panonychus ulmi* 7870.
 biodegradation, comparative studies, *Sancassania berlesii*, *Tetranychus urticae*
 308.
 carbamate, development, *Nilaparvata lugens* 320.
 chemical control, insecticides, *Acrididae*, *benzylalcohol*, *Musca domestica* 8497.
 chemical control, growth regulators, *Spodoptera littoralis* 1837.
 chemical control, *Tetranychus urticae*, British Isles 2980.
 control programs, biological control, chemical control, agricultural practices.
Diatraea saccharalis 1430
 crop protection, pest control, *Insecta* 3713.
 crop resistance, insecticides, *Pyrausta*, *Pyrausta*, *Blattella germanica* 5049.
 DDT, *Anopheles*, USSR 9436.
 DDT, *Anopheles*, USSR 9439.
 DDT, body size, fecundity, survival, *Culex quinquefasciatus* 5770
 DDT, chlorophos, *Cimex lectularius* 9434
 DDT, population genetics, bioaccumulation 1015.
 deltamethrin, enzymatic activity, *Myzus persicae*, *Phorodon humuli* 2657.
 detoxification mechanisms, permethrin, phrethroids, *Musca domestica* 1056.
 dicofol, metabolism, *Tetranychus urticae* 1840
 dimethoate, genetic variance, evolution, *Musca domestica* 9422.
 dimethoate, permethrin, *Musca domestica*, Germany, Fed. Rep. 311.
 disease control, malaria, research programs, *Anopheles* 9267.
 effects on development, fecundity, strains, *Musca domestica* 8197.
 effects on susceptibility, pyrethroids, *Culex pipiens* 310.
 enzymatic activity, γ -glutamyltransferase, *Culex pipiens* 310.
 enzymatic activity, *Nephotettix cincticeps* 2659.
 enzymatic activity, pyrethroid esterase, larvae, *Chrysopa carnea* 1839
 evolution, control programs, population genetics, *Culicidae* 5501.
 evolution, population genetics, models, *Insecta* 6289
 genes, N-nitrosodimethylamine toxicity, *Drosophila melanogaster* 7048.
 genetic control, enzymatic activity, *Culex pipiens* 3919.
 genetic factors, larvae, *Lucilia cuprina* 3132.
 genetics, biochemical characteristics, insecticides, aryl carbamates, *Metaseilus*
occidentalis 4688
 heritability, malathion, DDT, dieldrin, *Plodia interpunctella* 1560.
 inheritance, Malathion, *Anopheles stephensi* 304.
 insecticides, aerosols, drift, *Glossina morsitans*, Botswana 1469
 insecticides, chlorpyrifos, *Blissus insularis* 8191.
 insecticides, enzymatic activity, carboxylesterase, *Nephotettix cincticeps*, Japan
 5042
 insecticides, enzymes activity, *Musca domestica*, Malaysia 5774.
 insecticides, methyl parathion, *Heliothis virescens* 4221
 insecticides, pests, stored products, *Plodia interpunctella*, *Ephestia cautella*,
Tribolium castaneum, *USA*, Southeast 4223
 insecticides, strains, *Nilaparvata lugens* 4222.
 insecticides susceptibility selection, males release, *Anopheles gambiae* 6135.
 lindane, resistance mechanisms, *Musca domestica* 1849.
 malaria vectors, *Anopheles*, USSR 9438
 malaria vectors, disease control, reviews 644

Pesticide resistance, (continued)

- malathion, effects on fecundity, breeding success, *Sitophilus oryzae* 5043.
malathion, genetic factors, *Anopheles culicifacies* 1047.
malathion, migrations effects on, *Culex pipiens* 319.
malathion, pirimiphos-methyl, genetic variance, strains 7394.
malathion, population genetics, *Epilachna sparsa* 5498.
malathion, selection, *Drosophila melanogaster* 7868.
malathion, temperature effects, susceptibility, *Oryzaephilus surinamensis* 1058.
mechanisms, reviews, *Arthropoda* 9284.
methyl parathion, pyrethroids susceptibility, *Heliothis virescens* 8201.
methyl parathion, selection, *Heliothis virescens* 8667.
methyl parathion, susceptibility, insecticides, pyrethroids, *Heliothis virescens*, USA, South Carolina 4226.
permethrin, selection, biological control, *Amblyseius fallacis* 6288.
pest control, control programs, *Sorghum*, *Atherigona soccata* 4556.
pest control, *Haemaphysalis iritans* exigua, Australia 3430.
pest control, *Insecta* 9437.
pest control, juvenile hormones analogs, *Tribolium castaneum* 2239.
pest control, *Nilaparvata lugens* 8190.
pest control, *Oligonychus pratensis*, USA, Texas 1473.
pest control, orchards, reviews, *Malus*, *Insecta* 7727.
pesticides (organochlorine), electrophoresis, enzymes, strains, *Anopheles stephensi* 4216.
pesticides (organochlorine), pesticides (organophosphorus), carbamate, pyrethroids, strains, *Musca domestica* 4233.
pesticides (organochlorine), pesticides (organophosphorus), *Culex sitans*, *Anopheles sundaci*, Aedes, Singapore 5766.
pesticides (organophosphorus), enzymatic activity, *Musca domestica vicina* 3428.
pesticides (organophosphorus), enzymatic activity, *Musca domestica* 3439.
pesticides (organophosphorus), esterase activity, substrate specificity, *Tetranychus kanzawai* 7407.
pesticides (organophosphorus), genetic analysis, *Panonychus ulmi* 7869.
pesticides (organophosphorus), malathion, enzymatic activity, synergism, *Tetranychus kanzawai* 3449.
pests, stored products, Switzerland 6921.
phosphine, fumigants effects on fecundity, pest control, *Tribolium castaneum* 7692.
pipernyl butoxide effects on, enzymatic activity, *Labops* 1841.
pipernyl carb, population genetics, enzymatic activity, *Apis gossypii* 3922.
population genetics, *Insecta* 9424.
population genetics, mathematical models, *Glossina morsitans morsitans* 3122.
population genetics, permethrin, azinphos-methyl, *Amblyseius fallacis* 1063.
population genetics, selection, dimethoate, *Musca domestica* 3124.
population structure, population genetics, *Insecta* 5500.
population studies, *Anopheles culicifacies*, India 3131.
population studies, *Nephrotettix ciniceipes*, Taiwan 8504.
pyrethroid, effects on membrane composition, acetylcholinesterase activity, *Musca domestica* 5792.
pyrethroids, selection, strains, physiology, *Musca domestica* 1055.
rearing methodology, host plants, *Metasulius occidentalis* 8863.
selection, enzymatic activity effects on, *Nephrotettix ciniceipes* 305.
selection, genotypes, dieldrin, diazinon, *Lucilia cuprina* 7873.
selection, malathion, *Epilachna sparsa* 2963.
selection, population genetics, *Hylemyia antiqua* 8665.
stored products pests, *Plodia interpunctella*, *Ephestia cautella*, *Tribolium castaneum* 8205.
stored products pests, strains, genetic factors, *Bruchidae* 1068.
strains, lindane, *Dermetes maculatus*, British Isles 3115.
strains, *Plutella xylostella* 3443.
strains, selection, *Amblyseius fallacis* 5794.
surveys, *Boophilus microplus*, Australia 3448.
toxicology, chemical control, pests, *Insecta* 3817.

Pesticide-labeled organisms,

nontarget organisms, *Diptera*, USA, Southwest 2206.

Pesticides,

- carbofuran, diets, mortality, *Apis mellifera* 6201.
chemical control, *Agrotis ipsilon*, India 5375.
chemical control, efficacy, comparative studies, *Acar* 680.
chemical control, nuts pests, *Helopeltis antoni*, Sri Lanka 677.
chemical control, pesticide resistance, *Tetranychus urticae*, British Isles 2980.
chemical control, phenyl carbamates, *Nephrotettix* 2995.
chemical control, toxicity, Aedes aegypti, *Culex pipiens* 1832.
chemical control, toxicity, fluoroaldehydes, *Reticulitermes flavipes* 1054.
chlorideform, desmethylchlorideform, effects on hormones release, *Locusta migratoria* 5784.
deltamethrin, effects on flight activity, *Glossina morsitans* 314.
diflubenzuron, effects on reproduction, colonies, *Apis mellifera* 6622.
effects of precocene II, molting, metamorphosis, larvae, *Rhodnius prolixus* 364.
effects on apiculture, *Apis mellifera*, Mexico 3810.
effects on enzyme activity, cholinesterase, *Panmotesmes hybostoma* 5762.
effects on growth, pathogens, *Beauveria bassiana*, *Leptinotarsa decemlineata* 6152.
effects on mortality, apiculture, USA, New York 7752.
effects on nontarget organisms, predators food consumption, oviposition, *Amblyseius fallacis* 5131.
effects on oviposition, *Lyctus brunneus* 1060.
effects on predators, biological control, *Phytoseiulus persimilis*, *Tetranychus urticae* 3766.
efficacy, comparative studies, *Acarina* 294.
efficiency, pest control, *Trialetodes vaporariorum* 9291.
encapsulation, control, legislation, apiculture, USA, Massachusetts 3732.
endrin analogs, toxicity, *Diptera* 1072.
enzymes, glutathione transferase, activity, induction, toxicity, *Musca domestica* 5783.
integrated control, pests, predators, mathematical models 8465.
lindane isomers, toxicity, *Drosophila* 504.
nifurumox, mutagenicity testing, *Drosophila melanogaster* 5476.
pest control, *Insecta*, *Abelmoschus esculentus* 7706.
pest control, *Planococcus citri* 2189.
phenothiaz, dose-response effects, Aedes taeniorhynchus, *Anopheles quadrimaculatus*, *Musca domestica*, *Stomoxys calcitrans* 1401.
phenyl carbamates, chemical control, *Oryzaephilus surinamensis* 2994.
phenyl carbamates, chemical control, *Trypoxys incertus* 2999.
pipernyl carb, ethiofencarb, fenitrothion, toxicity evaluation, *Apis mellifera* 8171.
proliferation effects, uptake, *Culex pipiens* 4219.
profenox, effects on biological activity, *Culicidae*, *Musca domestica*, *Trichoplusia ni* 5775.

Pesticides, (continued)

- susceptibility, developmental stage effects on, *Boophilus microplus* 293.
toxicity, chemical control, government regulation, USA 7922.
toxicity, *Coleophora lanceolata* 5782.
toxicity, effects on enzymatic activity, acetylcholinesterase, correlation analysis, *Apis citricola* 1064.
toxicity, nontarget organisms, *Aphidoletes aphidimyza* 8173.
toxicity, synergism, *Spodoptera littoralis* 7400.
toxicity tests, *Amblyseius bibens* 2664.
toxicity tests, dimulio, larvae, *Apis* 7406.
toxicity tests, effects on nontarget organisms, predators, *Amblyseius fallacis* 5046.
toxicity tests, rearing, methodology, *Amblyseius fallacis*, *Tetranychus urticae* 7387.
toxicity, *Thyridodromus pyri*, *Panonychus ulmi*, *Malus* 297.
Pesticides (organochlorine), effects on hormones release, hyperlipemic hormone, corpora cardiaca, *Locusta migratoria* 5797.
lindane, DDT, toxicity, *Musca domestica* 7414.
pesticide resistance, electrophoresis, enzymes, strains, *Anopheles stephensi* 4216.
pesticide resistance, strains, *Musca domestica* 4233.
susceptibility, *Culex sitans*, *Anopheles sundaci*, Aedes, Singapore 5766.
Pesticides (organophosphorus), abate, fenitrothion, malathion, sensitivity, larvae, *Culex pipiens*, *Culex hortensis*, *Theobaldia longicauda* 8192.
effects on hormones release, hyperlipemic hormone, corpora cardiaca, *Locusta migratoria* 5797.
malathion, pesticide resistance, synergism, *Tetranychus kanzawai* 3449.
parathion, disulfoton, bioaccumulation, toxicity, larvae, *Bombyx mori* 2663.
pest control, *Psylliodes neobrunnea* 7720.
pesticide resistance, enzymatic activity, *Musca domestica vicina* 3428.
pesticide resistance, enzymatic activity, *Musca domestica* 3439.
pesticide resistance, esterase activity, substrate specificity, *Tetranychus kanzawai* 7407.
pesticide resistance, genetic analysis, *Panonychus ulmi* 7869.
pesticide resistance, strains, *Musca domestica* 4233.
susceptibility, *Culex sitans*, *Anopheles sundaci*, Aedes, Singapore 5766.
toxicity, *Culex pipiens pipiens* 9027.
toxicity, stored products pests, *Coleophora* 7403.
Pesticides (orthophosphate), pesticide resistance, genetic control, enzymatic activity, *Culex pipiens* 3919.
Pests, abundance, agricultural practices effects on, *Tryboryza nivella*, *Sesamia inferens*, Canada, Saskatchewan 8482.
abundance, crop fields, agricultural practices effects on, *Insecta* 3035.
abundance, crop fields, *Mayetiella destructor*, *Tritum*, USA 2191.
abundance, fertilizer application effects on, *Earias insulana*, *Pectinophora gossypiella*, *Gossypium* 6973.
abundance, habitat, *Phyllostreta cruciferae*, *Phyllostreta albionica*, *Psylliodes punctulata*, Canada, Saskatchewan 8482.
abundance, *Leguminosae* hosts plants, *Platyphora scabra*, USA, Tennessee 1425.
abundance, ornamental plants, *Lepidophyes tapleyi*, Egypt 6955.
abundance, ornamental plants, *Lindigaspis rivis*, Egypt 7650.
abundance, pest control, *Aceria litchii*, India, Bihar 7698.
abundance, predators effects on, *Brevicornia brassicae* 6908.
abundance, sampling methodology, *Thrips tabaci* 4534.
abundance, seasonal variations, crop fields, *Gossypium*, Egypt 6971.
abundance, seasonal variations, *Prunus serrulata*, *Pseudocaulis pentagona* 6089.
abundance, seasonal variations, *Sesudae*, USA, Mississippi 3786.
abundance, seasonal variations, *Sorghum*, *Atherigona soccata*, Nigeria 4560.
abundance, seasonal variations, *Tritolium*, Egypt 6978.
abundance, species richness, crop fields, *Camellia sinensis*, *Arthropoda* 4574.
abundance, temperature effects on, grazing, *Schizops graminum*, USA, Oklahoma 6922.
agricultural land, abundance, *Psylliodes chryscephala*, British Isles, England 2260.
agrochemicals, DIMBOA, effects on growth, *Ostrinia nubilalis* 6100.
antibiotics, resistance, *Eremochloa ophiuroides*, *Spodoptera frugiperda* 4406.
apiculture, biological control, pathogens, nuclear polyhedrosis virus, *Gallina mellonella* 8456.
apiculture, chemical control, *Varroa jacobsoni* 4586.
apiculture, colonies damage, *Apis mellifera*, *Vitula edmandsae* 1419.
apiculture, economies, *Ursus americanus*, USA, Florida 6090.
apiculture, environmental factors, economic analysis, Bangladesh 1411.
apiculture, reviews, *Varroa jacobsoni*, *Acarapsis woodi*, *Tropilaelaps clareae* 5945.
attractancy, sex pheromone, odors, chemosterilants, *Glossina morsitans morsitans*, *Glossina pallidipes* 6084.
autecology, crops, books, *Leguminosae*, *Bruchidae* 8707.
Azadirachtin indica effects on parasitism, *Telenomus remus*, *Spodoptera litura* 6214.
bibliographies, *Boarmiia selenana* 6213.
bibliographies, *Lycus* 3759.
bibliographies, *Oulema melanopus*, North America 7928.
bibliographies, *Solenopsis invicta*, *Solenopsis rickeri*, USA 7929.
bibliographies, taxonomy, *Carpopilus humeralis* 3764.
biological control, baculovirus, *Oryctes rhinoceros*, Western Samoa 6184.
biological control, bioassays, pathogenicity, methodology, *Bemisia tabaci*, *Trichoplusia ni* 4094.
biological control, crop protection, *Zea mays*, *Chilo partellus*, India 2958.
biological control, crop rotation, *Ostrinia nubilalis*, Switzerland 6917.
biological control, field trials, parasites, *Neoplectana bibionis*, *Synanthedon tipuliformis* 7767.
biological control, Homoptera, Southeast Asia 1451.
biological control, infection, *Bacillus thuringiensis israelensis*, *Bacillus sphaericus*, *Aedes stimulans* 3664.
biological control, infection, *Neoplectana bibionis*, *Synanthedon tipuliformis* 2207.
biological control, infection, *Pleistophora schubergii*, *Choristoneura fumiferana* 3812.
biological control, larvae, *Cochliomyia hominivorax* 3007.
biological control, *Musca domestica*, pupae parasites, *Muscidifurax raptor*, *Spalangia cameroni* 708.
biological control, mycotoxins, aflatoxins, *Aspergillus flavus*, *Zea mays*, *Ostrinia nubilalis* 4625.
biological control, natural enemies, *Myzus persicae* 723.

Pests, (continued)

- biological control, natural enemies, sex pheromone, *Pectinophora gossypiella*, USA, Arizona 1463
- biological control, natural enemies, *Tetranychus urticae*, *Phytoseiulus persimilis*, *Amblyseius potentillae*, *Amblyseius hibens*, *Metaseiulus occidentalis* 8709
- biological control, parasitism, *Heterorhabditis heliothidis*, *Oncophanes sulcatus* 2188
- biological control, parasitoids, *Torymus*, *Dryocossus kumuhua*, Japan 4545
- biological control, pathogens, crop fields, *Entomophthora*, *Aphis fabae* 7760
- biological control, pathogens, nuclear polyhedrosis virus, efficacy, *Ostrinia nubilalis* 8443
- biological control, predation, *Ornus insidiosus*, *Sericothrips variabilis* 2138
- biological control, predation, *Panonychus ulmi*, *Tetranychus urticae*, *Coniopteryx eboracensis*, Italy 2813
- biological control, predation, *Phytoseiulus macropilis*, *Phytoseiulus persimilis*, *Tetranychus urticae* 2205
- biological control, predators, *Hypera postica*, *Sitona hispidula* 612
- biological control, *Trichogramma evanescens*, *Heliothis punctiger* 1410
- biology, behavior, *Saccharum officinale*, *Eldana saccharina*, Ivory Coast 2098
- biology, control programs, conferences, *Athetia soccata* 4496
- biometrics, environmental conditions, egg laying, oviposition, *Dichocrois punctifera* 6924
- biometrics, host plants, resistance, susceptibility, *Medicago sativa*, *Therioaphis trifolii* 7757
- biometrics, infestation, cattle, *Ctenocephalides felis orientis*, India 8427
- biometrics, *Mangifera indica*, *Chlumetia transversa*, India, Uttar Pradesh 6121
- biometrics, *Nilaparvata lugens* 4806
- biometrics, emergence, *Nephrotettix cinctipes*, Japan 2297
- biometrics, population studies, population genetics, *Nilaparvata lugens* 3604
- bites, man, *Leptocnops torrens*, USA, California 8430
- borers, biology, behavior, control, *Coleoptera*, *Lepidoptera* 3628
- borers, life history, *Agrilus bilineatus*, USA, Wisconsin 4333
- buildings, *Cylindrotrichus tenuicornis*, *Anobium punctatum*, *Leptisima sechellana*, *Tyrophagus putrescentiae*, Czechoslovakia, Prague 592
- catching methods, comparison, standardization, *Phylloxera vitifoliae* 7251
- cattle, abundance, *Diptera*, Germany, Fed. Rep., Bavaria 2184
- cattle, surveys, *Diptera*, British Isles, Scotland 736
- check lists, *Manihot esculenta*, *Insecta*, India 4620
- check lists, predators, *Hypera postica*, USA 3736
- chemical communication, sex pheromone, *Lygocoris communis* 8098
- chemical control, chemosterilization methodology, *thiotepa*, *Stomoxys calcitrans* 5353
- chemical control, comparison, methodology, *Chilo partellus* 7759
- chemical control, crop fields, pesticide applications, electrostatic sprayer, *Insecta* 8486
- chemical control, diurnal/seasonal, *Spodoptera mauritia* 3034
- chemical control, effects on yield, *Citrus*, *Aonidiella aurantii* 8580
- chemical control, ethyl formate, *Myzus persicae*, *Frankliniella occidentalis* 2939
- chemical control, field trials, insecticides, fenvalerate, *Phylloxera vitifoliae* 8445
- chemical control, growth regulators, bioaccumulation: methoprene, cattle, *Haematobia irritans* 4520
- chemical control, insecticides, ear tags, cattle, *Musca autumnalis*, *Haematobia irritans* 6131
- chemical control, insecticides, methomyl, *Spodoptera frugiperda* 5416
- chemical control, insecticides, petroleum, *Aonidiella aurantii* 6906
- chemical control, insecticides, seed treatments, *Triticum*, *Microtermes obesi*, India 5398
- chemical control, insecticides, *Siphonaptera* 7637
- chemical control, methodology, *dichlorvos*, *Megaselia halterata* 1461
- chemical control, seeds viability, *Sorghum vulgare*, *Atherigona* 7782
- chemical control, sex pheromone, inhibitors, females, *Diparopsis castanea* 1465
- chemical control, systems, aldicarb, thiofanox, bufencarb, *Bemisia tabaci*, *Empoasca kraemeri* 6196
- chemical control, toxicology, pesticide resistance, *Insecta* 3817
- chemotaxis, volatiles, host plants, pollution effects, sulfur dioxide, *Insecta* 5132
- coconut, chemical control, insecticides, *Nephantis serripa* 1396
- control programs, abundance, *Isodidae*, *Botswana* 3672
- control programs, biological control, chemical control, *Earias*, *Pectinophora gossypiella* 1444
- control programs, biological control, parasitoids, *Trichogramma* 1421
- control programs, pesticide resistance, biological control, chemical control, agricultural practices, *Diatraea saccharalis* 1430
- control programs, population growth, *Stilpnotus oryzae* 5333
- crop fields, abundance, diurnal variations, *Cyclops formicarius elegantulus* 4535
- crop fields, books, *Insecta*, Indonesia 5543
- crop fields, *Capsicum annuum*, *Melanosis*, India, Dharwad 5365
- crop fields, dispersal, flight activity, *Schizaphis graminum*, 3770
- crop fields, *Insecta*, *Cajanus cajan* 4553
- crop fields, *Saccharum officinale*, species composition, population levels, *Elateridae*, Brazil, Sao Paulo 6098
- crop fields, sampling methodology 4629
- crop fields, sampling methodology, *Arthropoda* 5629
- crop fields, sampling methodology, *Empoasca fabae*, *Medicago sativa* 8470
- crop fields, sampling methodology, *Heliothis zea*, *Lycopersicon* 8529
- crop fields, taxonomy, *Jassidae*, Egypt 6419
- crop fields, yield, damage, *Philaenus spumarius*, *Medicago sativa* 8561
- crops damage, effects on seeds quality, *Glycine max*, *Ceratomyces trifurcata* 8511
- crops damage, *Graphognathus leucomela*, *Lepidoptera*, New Zealand, North I. 5415
- crops damage, *Pisum*, *Malenagromyza phaseoli*, India 9336
- crops, sugar beet, *Chaetocnema coarctata*, *Chaetocnema discreta*, Japan 1241
- cultivars, resistance, *Vigna unguiculata*, *Lygus lineolaris*, *Anticarsia gemmatilis*, *Nezara viridula*, *Chalcodermus aeneus*, *Aphis* 4614
- damage assessment methodology, trees, *Choristoneura fumiferana* 8866
- damage, contamination, *saurekraut*, *Thrips tabaci* 8508
- damage, crop fields, *Arachis hypogaea*, *Isotera* 5360
- damage, crop fields, *Carthamus tinctorius*, *Acanthopimpla heliathi* 7779
- damage, crops, *Medicago sativa*, *Empoasca fabae* 9252
- damage, forests, *Choristoneura fumiferana*, Canada 3779
- damage, fruits, cytology, *Malus*, *Tetranychus medianii* 5403
- damage, historical account, infestation, *Pectinophora gossypiella*, USA, California, Imperial Valley 8558
- damage, host plants, susceptibility, *Panicum millacium*, *Antherigona varia soccata* 7704

Pests, (continued)

- damage, *Nicotiana tabacum*, *Heliothis virescens*, *Heliothis zea*, USA, Maryland 4611
- damage, plantations, *Odontotermes gurdapurensis*, *Odontotermes obesus*, *Eucalyptus*, India 7700
- damage, *Sorghum bicolor*, *Nezara viridula*, *Chlorochroa ligata*, *Leptoglossus phyllopus* 8581
- defoliation, crop yield, *Glycine max*, *Cynthia cardui*, *Platypena scabra* 3781
- defoliation, effects on yield, crops, *Zea mays*, *Mythimna separata* 6941
- defoliation, effects on yield, *Oryza sativa*, *Pseudaletia unipuncta* 8489
- defoliation, host plants, *Datura innoxiosa*, *Juglans nigra*, USA, Illinois 7725
- detection, spatial distribution, traps, mathematical models, *Anthonomus grandis* 2242
- development, breeding sites, host plants, *Scolytus multistriatus*, *Ulmus procera* 6195
- development, fecundity, host plants, winter, *Myzus persicae*, India, Simla 7746
- development, growth, *Lens culinaris* flour effects on, *Callosobruchus maculatus* 7772
- development, host plants varieties, *Amrasca devastans*, *Earias vittella*, development 7791
- development, larvae, damage, *Abies alba*, *Earomyia* impossible, *Earomyia grusia*, Romania 6920
- disease transmission, *Hafnia alvei*, *Costyleura zealandica*, New Zealand, Canterbury 5723
- disease transmission, literature reviews, *Culicidae* 1350
- dispersal, crop fields, *Tetranychidae* 6976
- dispersal, larvae, eggs, *Pulvinaria lesemeyrianthemi*, USA, California 2160
- dispersion, seasonal variations, host plants, *Leucodermis orbonalis*, India, Sabour 7741
- distribution, host plants, nymphs, *Hibiscus esculentus okra*, *Amrasca biguttula biguttula* 5298
- ecological distribution, population density, *Nephrotettix cinctipes*, Japan 2142
- economic importance, *Ascia monuste*, *Plutella listelloella*, *Pieris aripa*, Venezuela 2777
- economic importance, effects on cattle, reviews, *Haematobia irritans irritans*, USA 5279
- ectoparasites, population regulation, *Aphis nerii*, *Neurium oleander*, USA, California 1276
- effects on activity patterns, livestock, *Haematobia irritans* 3688
- effects on crop production, *Therioaphis trifolii*, *Medicago sativa* 685
- effects on crop yield, *Vigna unguiculata*, *Nezara viridula*, *Leptoglossus phyllopus* 3769
- effects on crops, *Medicago sativa*, *Acyrtosiphon pisum* 6970
- effects on growth, host plants, *Malus*, *Magicada* 6126
- effects on host plants chemical composition, *Acyrtosiphon*, *Medicago sativa* 540
- effects on host plants chemical composition, *Medicago sativa*, *Agromyza frontella* 9296
- effects on host plants, leaf fall, photosynthesis, *Pyrus communis*, *Bucculatrix pyrivorella* 7745
- effects on orchards, damage, *Carya illinoensis*, *Curtulio caryae* 2221
- effects on plants roots, *Geocia utricularia* 726
- effects on plants, *Triticum aestivum*, *Aphididae* 548
- effects on silviculture, economic importance, models, *Pinus resinosa*, *Neodiprion lecontei*, USA 5413
- effects on yield, *Empoasca fabae*, *Medicago sativa* 731
- emergence, diurnal variations, *Chilo partellus*, India 5135
- environmental effects, food consumption, wood, *Hydrolytus bajulus* 2000
- environmental effects, relative humidity, *Copidosoma koehleri* 1935
- environmental effects, soil temperature, overwintering eggs development, *Diabrotica virgifera virgifera* 1863
- environmental management, control programs, *Insecta*, USA, Arizona 1434
- eradication, population ecology, sterile-release, *Dacus cucurbitae* 6087
- evaluation, damage, crops, *Lens culinaris*, *Spodoptera perfracta* 8483
- feeding behavior deterrents, leaves, cyanide, *Prunus persica*, *Choristoneura rosaceana* 8501
- feeding behavior, growth, orientation, host plants, *Atherigona soccata* 4563
- feeding damage, crops, *Brassica oleracea*, *Trichoplusia ni*, *Pieris rapae*, *Plutella xylostella* 8502
- feeding damage, *Myzus persicae*, *Solanum tuberosum* 8543
- feeding damage, *Oenothera lutea*, *Sorghum* 8506
- feeding damage, *Ostrinia nubilalis*, *Phaseolus vulgaris* 8571
- feeding deterrents, oils, *Anthonomus grandis* 2252
- feeding, effects on avoidance behavior, grazing, cattle, *Musca autumnalis* 8568
- feeding effects on yield, *Poa pratensis*, *Cyclocephala immutata* 3773
- feeding, host plants, exudates, *Saissetia*, *Pyroglomma*, Germany, Fed. Rep., Darmstadt 1207
- feeding site preferences, *Apium graveolens*, *Lepidoptera* 8550
- flight activity, life cycle, sampling methodology, *Euxoa scandens* 6094
- food plants, feeding, *Spodoptera littoralis*, Ghana 2849
- food preferences, food plants, genotypes, *Stilpnotus oryzae*, *Zea mays* 8544
- food preferences, nutrient utilization, genotypes, *Zea mays*, *Stilpnotus oryzae* 4358
- food sources, infestation, fruits, *Caulophorus oryzae* 6137
- forest management, biological control, *Insecta*, Germany, Fed. Rep. 1392
- forests, development, *Dasineura larticus*, USSR, Siberia 6940
- forests, feeding, food conversion, *Alphitobius herycine* 7696
- fruit trees, biological control, *Aphis lepidosa*, *Leptostomus beckeri*, Spain, Valencia 1458
- fruit trees, biological control, *Bacillus thuringiensis*, *Archips argyrospilus* 679
- fruit trees, life history, *Nippo laevis piri*, India 4554
- fruit trees, opening effects on infestation, *Carica papaya*, *Dacus dorsalis*, USA, Hawaii 4616
- galls, host plants, *Solanaceae*, *Eriophyes cladophorus* 6910
- genetics, hybridization, biotypes, *Nilaparvata lugens* 5489
- geographical distribution, agricultural lands, *Agrotis ipsilon*, India 5367
- geographical distribution, population dynamics, host-parasite interactions, *Dropsia thoracica*, Senegal 7753
- geographical distribution, taxonomy, *Coccus celatus*, Papua New Guinea 3215
- grainware trapping efficacy, *Anthonomus grandis* 8528
- growth, development, food plants effects on, *Callosobruchus maculatus* 7737
- habitat, *Culex salinarius*, USA, New Jersey Coast 6054
- host plants association, *Antherigona*, *Actinochaeta*, India 4557
- host plants associations, food preferences, cannibalism, larvae, *Diacrisia obliqua* 1209
- host plants damage, *Heliothis virescens*, *Heliothis zea*, *Nicotiana tabacum* 8536

Pests, (continued)

- host plants infestation, *Cydia pythor*, *Arachis hypogaea*, India 6948
 host plants, new records, *Aegyplobia nomus*, *Buchloe dactyloides* 2066
 host plants, *Piper nigrum*, *Loasigium nigrispinus*, *Cydia hemidoxa*, *Lothrips karnyi*, India, Kerala 6946
 host plants, range, geographical distribution, 10 species, *Scirtothrips* 1261
 host plants resistance, *Cylas formicarius*, *Ipomoea batatas* 1233
 host plants susceptibility, *Brevicoryne brassicae*, *Brassicaceae* 6085
 host plants susceptibility, cultivars, *Malus pumila*, *Laspeyresia pomonella* 5313
 host plants susceptibility, feeding, *Nephotettix virescens*, *Oryza sativa* 8569
 host plants, susceptibility, *Solanum melongena*, *Leucanodes orbonalis* 7710
 host plants susceptibility, *Tritium* varieties, *Trogoderma granarium* 9304
 house dust, life cycle, *Dermatophagoides pteronyssinus* 6056
 houses, surveys, *Blattidae*, Thailand 6066
 incidence, *Sorghum*, *Athergona soccata*, China, People's Rep 4559
 infestation, abundance, ornamental plants, *Rhabdoporus picipes* 1429
 infestation, agricultural practices effects on, *Earias insulana*, *Pectinophora gossypiella*, *Gossypium* 6972
 infestation, biological control, predators, *Parabemisia myricae*, USA, California 1435
 infestation, *Brassica campestris*, *Delia*, Canada, Alberta 8479
 infestation, clove, *Pulvinaria psidi* 2089
 infestation, control, *Ceratitis capitata*, USA, California 1442
 infestation, control, fruits, *Polyphagotarsonemus* 741
 infestation, crops, damage, economics, *Gossypium*, *Heliothis* 4612
 infestation, cultivars susceptibility, *Brassica napus*, *Dasineura brassicae* 9308
 infestation, *Dacus oleae*, *Nerium oleander*, Crete 9310
 infestation, damage, *Frugaria*, *Tetranychus urticae* 6200
 infestation, damage, *Gossypium*, *Aphis gossypii* 6189
 infestation, damage, *Trifolium alexandrinum*, *Bruchus affinis* 6964
 infestation, damage, yield, *Heliothis* *zea*, *Gossypium* 8576
 infestation effects on crop fields, *Diatraea grandiosella* 3822
 infestation, effects on crop yield, *Medicago sativa*, *Acyrtosiphon kondoi* 3774
 infestation, effects on crop yield, *Tetranychus urticae*, *Frugaria vesca* 3776
 infestation, effects on foliage nutrients, *Tetranychus urticae*, *Arachis hypogaea* 3794
 infestation, effects on host plants biochemical characteristics, *Aphis fabae*, *Beta vulgaris* 7781
 infestation, effects on plants growth, *Forcipata loca*, *Festuca arundinacea* 2087
 infestation effects on yield, *Agromyza frontella*, *Medicago sativa* 8563
 infestation, effects on yield, *Empoasca fabae*, *Solanum melongena* 8485
 infestation, effects on yield, *Gossypium*, *Heliothis* 5582
 infestation effects on yield, *Phyllophaga*, *Pinus resinosa* 7765
 infestation, effects on yield, *Sorghum* 6164
 infestation, effects on yield, *Tetranychus arabis*, *Gossypium* 6961
 infestation, effects on yield, *Tritium*, *Stibion avenae* 2042
 infestation, factors affecting population density, *Carica papaya*, *Dacus dorsalis* 8538
 infestation, geographical variations, damage, *Pinus ponderosa*, *Rhyacionia bushnellii*, USA, Nebraska 4405
 infestation, host plants susceptibility, chemical control, *Manihot esculenta*, *Mooneychellus caribbaea* 1428
 infestation, host plants susceptibility, *Synanthedon pictipes* 7755
 infestation, *Linum usitatissimum*, *Trionymus dimidiatus*, British Isles, England 2096
 infestation, livestock, *Ixodoidea*, *Barbados* 1328
 infestation, *Manihot esculenta* crop fields, *Isoptera*, Brazil, Para State 4597
 infestation prediction, *Vicia faba*, *Aphis fabae* 2969
 infestation, public health, *Insecta* 217
 infestation, *Rhabdoporus pomonella*, USA, Oregon 3762
 infestation, sampling methodology, *Coloclethines*, *Pinus jeffreyi* 8559
 infestation, seasonal variations, *Saccharum officinale*, *Tyrtopyra nivella*, Bangladesh 1246
 infestation, stored products, *Hordeum*, *Rhyzopertha dominica* 2257
 infestation, varieties, susceptibility, *Saccharum officinale* 6952
 infestation, wood, *Synthesus cornutus*, *Trametes lisei*, *Gilva* 9271
 insecticides, pyrethroids, toxicity, selectivity, reviews, *Insecta* 7408
 instars, morphology, *Phragmocossia albida* 4100
 integrated control, ecological evaluation, orchards, *Malus*, *Insecta* 7730
 integrated control, horticulture, New Zealand 6082
 integrated control, methodology, *Psylla pyricola*, USA, Washington 3008
 integrated control, predators, pesticides, mathematical models 8465
 integrated control, reviews, *Solanum tuberosum*, *Insecta* 6209
 karyotypes, salivary gland chromosomes, *Melanogaster obtusa*, India 5466
 killer bees, *Apis mellifera* *adansoni*, Central America, South America 4637
 landing behavior, host plants, *Pinus radiata*, *Ips platographus maritimus*, USA, California 7379
 life cycle, control programs, *Lymantilla xylinia*, China, People's Rep 4580
 life cycle, control programs, *Zonocorus variegatus*, Nigeria 8481
 life cycle, damage, crop fields, *Diabrotica* 7715
 life cycle, diets, *Heliothis antonii*, Sri Lanka 4532
 life cycle, domestic animals, *Haematopis tuberculatus* 6070
 life cycle, feeding, *Cardiastethus nazareus* 6965
 life cycle, infestation, citrus groves, *Azarcus fasciculatus*, USA, Florida 8565
 life cycle, infestation, *Rhopalosiphum maidis*, *Zea mays*, India 9338
 life cycle, *Podagrica punctulicollis*, Sudan 2852
 life history, chemical control, damage, host plants, *Mindarus abietinus*, USA, North Carolina 4336
 life history, control programs, *Athergona*, Sudan 4562
 life history, crop fields damage, *Teiphusa pascuae*, *Pistacia vera*, Iran 5296
 life history, population dynamics, *Pissodes strobi*, *Pinus strobus*, USA, Maine 6187
 light effects, colonization, crop protection barriers, behavior, *Myzus persicae* 1172
 livestock, abundance, *Musca autumnalis*, *Pinus caroliniana* 3673
 livestock, disease transmission, pest control, *Stomoxys calcitrans*, *Tabanidae* 3743
 management, integrated control, *Dendroctonus frontalis* 9329
 medical importance, life cycle, ecology, *Cimex* 1354
 medical importance, *Tyroglyphidae* 655
 migrations, locomotor activity, environmental conditions, *Mythimna separata* 1170
 monitoring methodology, mapping, *Porophora columbica*, USA, Louisiana 5397
 monitoring methodology, population dynamics, *Apibidite* 725
 morphology, *Acia lineatirons*, South Africa, Western Cape Region 4944
 morphology, *Matsucoccus josephi* 8870

Pests, (continued)

- movements, buildings, urban environments, *Blattella germanica* 8436
Musca domestica, *Stomoxys calcitrans*, *Fannia canicularis*, *Drosophilidae*, Germany, Fed Rep 632
 natural enemies, predators, *Chaenusa*, *Hydrellia philippina*, India 7673
 natural enemies, predators, crops, *Beta vulgaris*, *Aulacothorus solani*, *Myzus persicae*, New Zealand 8492
 natural enemies, surveys, *Aphis craccivora*, *Lipaphis erysimi*, India 6943
 natural enemies, surveys, *Myzus persicae*, *Spodoptera litura*, India 6926
 nests, occurrence, *Apis mellifera*, *Pseudophocera kerteszi*, Colombia 1315
 new records, attack, host plants, *Scutotetranychus*, *Crotalaria spectabilis* 7675
 new records, *Bemisia hancocki*, *Laurus nobilis*, British Isles 2977
 new records, geographical distribution, morphology, *Precilius cardamomi*, Japan, Taiwan 2359
 new records infestation, *Citrus*, *Othresis fulvionica*, *Othresis materna*, India, Punjab 7790
 new records, infestation, *Glycine max*, *Epilachna dodecastata*, Bangladesh 1247
 new records, *Neomeskelia bergii*, *Pennisetum typhoidum*, India, Jodhpur 1441
 new records, predators, *Spodoptera litura*, *Araneae*, India, Andhra Pradesh 1439
 new records, seeds, *Zea mays*, *Caloglyphus krameri*, *Parasitus consanguineus*, *Prodnuthus*, India, Punjab 7735
 new species, *Colaspis chapulensis*, Mexico, Jalisco 8769
 new species, morphology, taxonomy, *Megastela sandhu*, India 823
 new species, *Oligonychus senegalensis*, *Oryza sativa*, Senegal 8713
 nuts, chemical control, *Helopeltis antoni*, Sri Lanka 677
 occurrence, damage, crop fields, *Poecilimon bosporicus*, Turkey 4537
 ornamental plants dispersal, *Hyadaphus lataneae*, *Lonicera*, USA 7793
 ornamental plants, population dynamics, *Macrosiphum rosae*, *Macrosiphum rosaeformis* 4530
 overwintering larvae, soil distribution, *Smectonys fulvus*, *Helianthus annuus* 6932
 oviposition, habitat preferences, host plants, *Marcus testulalis*, *Vigna unguiculata* 8349
 oviposition, orientation, host plants susceptibility, *Chilo partellus* 7680
 oviposition, site preferences, *Diabrotica virgifera*, *Diabrotica longicornis*, *Zea mays* 6966
 parasitism, *Monella caryella*, *Carya pecan*, USA, Texas 6155
 parasites, natural enemies, *Malacosoma indica*, India 6768
 parasitism, surveys, *Spodoptera lituralis*, Egypt 6975
 parasitoids, *Clavigralla tomentosicollis*, Africa 2814
 parasitoids, host preferences, *Noctuidae*, USA, Florida 4374
 parasitism, *Nephus scirpae*, *Brachymeria monoi*, *Brachymeria nephantidis*, India, Kerala 6761
 pastures, mounds, control programs, destruction, *Solenopsis invicta* 1460
 pathogenicity, *Pacilomyces farinosus*, *Insecta* 1001
 pathogens incidence, *Spodoptera frugiperda*, *Heliothis zea*, USA, Georgia 3407
 persistence, grazing, ranglands, eggs, *Heilmela olivae*, USA, New Mexico, Lincoln Co 8585
 pest control, *Persea* fruits, *Insecta* 1454
 pest resistance, *Phaselus lunatus*, *Empoasca kraemerii* 4592
 pesticide resistance, population structure, population genetics, *Insecta* 5500
 pesticide resistance, selection, malathion, *Epilachna sparsa* 2963
 pheromone traps catches, synthetic pheromones effects on, *Synanthedon* 1383
 population decline, environmental effects, grazing, weather, *Tabanus similis*, *Chrysops aeneus*, USA, South Dakota 4474
 population density, spatial distribution, agricultural practices effects on, *Oryza sativa* crop fields, *Oreocitrus*, *Scirpophaga incertulas* 6947
 population dynamics, association phenology, *Glycine max*, *Nezara viridula* 8351
 population dynamics, *Bemisia tabaci*, Jordan 7622
 population dynamics, *Cephus*, *Heliothis*, Egypt 6949
 population dynamics, crop fields, *Cephus cinctus*, *Triticum* 8464
 population dynamics, crop fields, *Coccinella septempunctata*, Germany, Fed Rep 9339
 population dynamics, *Deos flavopicta*, *Zulia enteriana*, Brazil 6158
 population dynamics, Egypt, *Myzus persicae*, *Aphis gossypii*, *Empoasca decipiens*, *Solanum tuberosum*, Egypt 6958
 population dynamics, host plants, *Brassica*, *Lipaphis erysimi*, India 7776
 population dynamics, natural enemies, *Insecta*, conferences 8672
 population dynamics, orchards, *Dacus oleae*, *Olea europaea*, Crete 7798
 population dynamics, orchards, *Malus*, *Lithocolletus blancardella*, Switzerland 6918
 population dynamics, orchards, *Myzus persicae*, *Grapholita molesta*, Brazil 6034
 population dynamics, seasonal variations, spatial distribution, crop fields, *Brassica oleracea*, *Myzus persicae*, *Brevicoryne brassicae*, USA, California 4608
 population dynamics, *Spodoptera frugiperda*, *Heliothis zea*, *Gueloupe* 6870
 population dynamics, *Zenopneura dimaria*, France 8450
 population genetics, sex ratios, *Phyllonorycter sorbicola*, Japan 2347
 population growth, grain, *Heliothis armigera*, *Zea mays*, *Sorghum bicolor* 5329
 population growth, host plants varieties, *Spodoptera litura*, *Arachis hypogaea* 6911
 population growth, mushrooms cultivation, composts, *Lycoriella mali* 6172
 population growth, *Sylepta derogata*, *Gossypium* 9282
 population levels, measuring techniques, *Pseudotsuga menziesii* stands, *Choristoneura occidentalis* 8478
 population levels, *Tabanus*, *Chrysops*, USA, South Dakota 8576
 population regulation, host plants, *Aphis craccivora*, *Vigna sinensis* 9188
 population-environment relations, primary production, *Frugaria vesca*, *Tetranychus urticae* 2060
 poultry, chemical control, *Ornithonyssus sylvarum* 1452
 predation, effects on population levels, *Agelaius phoeniceus*, *Ostrinia nubilalis*, Canada, Quebec, Beauharnois 5262
 predators efficiency, environmental factors, orchards, *Malus*, *Panonychus ulmi* 8398
 predators, nontarget organisms, insecticides toxicity, *Heliothis*, *Gossypium* 8172
 prey, identification, precipitin test 1690
 y radiation, effects on physical activity, membranes, *Dermetes vulpinus* 5133
 rearing, survival, development, *Blissus leucopertus* 65
 rearing systems, automation, methodology, *Diatraea grandiosella* 4093
 records, occurrence, egg production, *Leptinotarsa decemlineata*, British Isles 1440
 remote sensing methodology, defoliation, abundance, geographical distribution, *Datana integerrima* 8855
 reproduction, population growth, *Cerculea elaphus*, Hungary 7703
 reproductive status, sex ratio, *Earias insulana*, Israel 9175
 sampling, attractants, *Athergona*, *Athergona soccata* 4077
 sampling, pheromone traps, *Spodoptera frugiperda*, Canada, Ontario 8555

Pests, (continued)

seasonal variations, occurrence, *Diatraea grandiosella*, USA, Texas 9102.
 sexual behavior, oviposition, *Phibia picta*, Brazil, Sao Paulo 5105.
 sexual reproduction, pest resistance, *Solanum*, *Myzus persicae* 4633.
 ships, population levels, estimation, *Blattella germanica* 2162.
 silviculture, damage, defoliation, *Populus*, Insecta 5349.
Sogatella furcifera, China, People's Rep. E. China Sea 1443.
 soil, species composition, Insecta, India, Dharwad 5366.
Solenium, vertical distribution, *Myzus persicae* 1234.
 spatial distribution, host plants, *Helianthus annuus*, *Smurcynus fulvus* 6091.
 spatial distribution, host plants, *Helianthus annuus*, *Smurcynus fulvus* 9309.
 spatial distribution, host plants, microclimate, population levels, *Aonidiella aurantii*, Greece, Crete 1256.
 spatial distribution, host plants, sampling, *Brevicorye brassicae*, *Myzus persicae*, USA, California, Orange Co. 8358.
 spatial distribution, host plants, sampling, *Gossypium*, *Trichoplusia ni* 6107.
 species composition, ecological distribution, *Scolytoidae*, *Platyphodidae*, South America 7722.
 species composition, *Manihot esculenta* crop fields, Insecta, Acari, USA, Florida 4555.
 species composition, crop fields, *Triticum*, *Carabidae*, USSR, Ukraine 6919.
 stored products, abundance, *Ephestia kuehniella*, British Isles, Scotland 2264.
 stored products, abundance, *Pyralidae*, *Gelechiidae*, Greece 7661.
 stored products, atmospheric conditions effects on, *Acarna* 1395.
 stored products, biological control, *Bacillus thuringiensis*, *Plodia interpunctella*, *Ephestia cautella* 8474.
 stored products, chemical control, decamethrin, *Zea mays*, *Sitophilus zeamais*, *Sitotroga cerealella* 6192.
 stored products, chemical control, fumigants, Acari 1045.
 stored products, chemical control, growth regulators, CGA-28772 9331.
 stored products, chemical control, insecticides 8545.
 stored products, chemical control, phosphine resistance, *Tribolium castaneum* 1046.
 stored products, chemical control, *Tribolium castaneum*, *Oryzaephilus surinamensis*, *Sitophilus granarius* 5354.
 stored products, community composition, *Manihot esculenta*, Malaysia 5386.
 stored products, community composition, seasonal variations, *Tribolium confusum*, *Sitophilus oryzae*, *Ephestia kuehniella*, *Rhyzopertha dominica*, Japan 3640.
 stored products, detection, traps, Insecta 3783.
 stored products, development, life cycle, *Callosobruchus maculatus* 5314.
 stored products, development, whey-sour drink mix, Insecta 9323.
 stored products, effects on food quality, *Acarna* siro 2202.
 stored products, effects on *Zea mays* chemical content, *Prostephanus truncatus*, *Sitophilus zeamais*, *Sitotroga cerealella* 3767.
 stored products, feeding, mortality, temperature, *Sitophilus granarius* 6112.
 stored products, fumigation, methyl bromide, phosphine, *Tribolium castaneum* 6627.
 stored products, growth regulators, CGA-28772, *Plodia interpunctella*, *Ephestia cautella*, *Sitotroga cerealella*, *Oryzaephilus surinamensis*, *Tribolium confusum* 6103.
 stored products, growth regulators, residual effects, *Rhyzopertha dominica*, *Sitophilus oryzae* 8572.
 stored products, infestation, environmental effects, *Glyciphagus destructor*, *Acarna* siro, *Triticum* 7693.
 stored products, life history, *Sitophilus granarius*, *Sitophilus oryzae*, *Sitophilus zeamais* 5152.
 stored products, pesticide resistance, genetic factors, strains, *Bruchidae* 1068.
 stored products, pesticide resistance, insecticides, *Plodia interpunctella*, *Ephestia cautella*, *Tribolium castaneum*, USA, Southeast 4223.
 stored products, pesticide resistance, *Plodia interpunctella*, *Ephestia cautella*, *Tribolium castaneum* 8205.
 stored products, pesticide resistance, Switzerland 6921.
 stored products, phosphine toxicity, Insecta 1050.
 stored products, phosphine toxicity, Insecta 1051.
 stored products, population dynamics, *Sitophilus oryzae*, *Trogoderma granarium*, *Tribolium castaneum*, *Triticum* 5330.
 stored products, population growth, grain, *Sitophilus zeamais*, *Tribolium castaneum* 5344.
 stored products, repellents, comparative studies, Insecta 711.
 stored products, reproduction, *Sitophilus oryzae*, *Tribolium castaneum*, *Oryza sativa* 7679.
 stored products, surveys, Insecta, Saudi Arabia 3738.
 stored products, susceptibility, fumigants, food plants effects on, *Callosobruchus chinensis* 7672.
 stored products, toxicity, DDT, *Lundane*, Insecta 7409.
 stored products, toxicity, pesticides (organophosphorus), *Coleoptera* 7403.
 stored products, *Triticum*, *Acarna* siro, *Acarna* farms, *Aerolophus robustus*, *Lepidoglyphus destructor*, *Tyrophagus putrescentiae* 8513.
 stored products, vertical distribution, factors affecting, *Oryzaephilus surinamensis*, *Sitophilus oryzae*, *Rhyzopertha dominica* 1445.
 succession, population growth, *Oryza sativa*, Insecta, India 7783.
 surveys, Acari, Senegal 9285.
 surveys, agriculture, horticulture, forestry, Insecta, Denmark 5308.
 surveys, pheromone traps efficacy, Ips 2194.
 surveys, *Vaccinium corymbosum*, *Arthropoda*, USA, Arkansas 4551.
 susceptibility, cultivars, *Poa pratensis*, *Sphenophorus parvulus* 537.
 susceptibility, host plants, *Picea glauca*, *Pikonomia alaskensis* 7785.
 susceptibility, host plants, sulfur dioxide effects on, *Epilachna varivestis*, *Phaeocephalus* 6782.
 susceptibility, insecticides, toxicity tests, *Locustana pardalina* 5039.
 Symmetrical *Schermia capsa*, parasites life history, *Agathis*, *Apanteles*, *Bracon*, *Aspilophary capicum*, *Perisera* 6720.
 Taxodomy, life cycle, feeding behavior, *Dioctria pygmaeella*, USA, Florida 3560.
 temperature effects on flight activity, predations, *Ostrinia nubilalis*, USA, Ohio 5124.
 temperature, effects on population growth, *Toxoptera citricidus*, *Aphis citricola*, *Aphis gossypii* 7619.
 toxicity, insecticides, *Lipaphis erysimi*, *Aphis craccivora* 7410.
 toxicity, methyl bromide, phosphine, 7 species, *Coleoptera* 1073.
 trapping, attractants, synthetic sex pheromone, *Homona magnanima*, Japan 5336.
 trapping, sex lures, *Carposina niponensis*, *Grapholitha molesta*, *Synanthedon* bector, *Archipus brevipalpis*, Japan 5334.
 traps, *Hylemya platana* 5619.
 vegetables infestation, sampling, *Lepidoptera* 2196.
 vertical distribution, crops, *Brassica*, Insecta, India, Meghalaya 7687.
 weather, effects on population dynamics, *Lepidoptera*, Brazil 6834.
 weeds, surveys, Insecta, Egypt 6957.

Pests, (continued)

wind dispersal, *Homoeosoma electellum*, USA, Gulf Coast, Canada, Saskatchewan 2100.
 yield, damage, selection, *Zea mays*, *Diatraea saccharalis*, *Spodoptera frugiperda* 1751.
Petalonium racleae, new species, taxonomy, morphology, Poland 4761.
Petrogale, hosts, parasites, surveys, *Heterodaxus*, Australia 2921.
Petroleum, insecticides, chemical control, pests, *Aonidiella aurantii* 6906.
Petrova albicapitana, pest control, distribution 2057.
Peuceletia viridians, food organisms, diets 9122.
pH, aging, *Drosophila melanogaster* 3452.
 digestive tract, hydrogen ions, *Odonotermes distans*, *Neotermes bosei* 1747.
 effects on melittin conformation, C.D., venom, *Apis mellifera* 4206.
 effects on population dynamics, *Stomoxys calcitrans* 2148.
 effects on population dynamics, *Stomoxys calcitrans* 7606.
 hemolymph, *Bacillus thuringiensis* effects on, pathogenicity, *Achaea janata*, *Spodoptera litura* 7378.
 midgut, infection effects on, *Bacillus thuringiensis*, *Aedes aegypti* 3423.
 toxicity, ponds, *Othobcladius consobrinus*, *Limnephilus pallens*, *Chironomus riparius*, Canada, Northwest Territories 6696.
Phaedon cochleariae, insecticides, pharmacokinetics, toxicity 1019.
 insecticides toxicity, structure-activity relationships 2661.
Phaenicia eximia, carrion, community composition, succession, Costa Rica 5166.
Phaenicia sericata, sense organs, horizontal cells, neurophysiology, anatomy 4138.
Phaenocarpus meritoria, new species, morphology, Tunisia 2449.
Phaenogaster, taxonomic revision, keys, species, Australia 2402.
Phaenogenini, systematics 4029.
Phaenotrymon alceste, habitat, life history, USA, West 7513.
Phaenocarpa cujennensis, life history, seasonal variations, Brazil, Manaus 4426.
Phaetorinus, foraging behavior, competition, nectar, *Trigona ferricauda*, Panama 4409.
Phaethoniscus superciliosus, feeding behavior, competition, *Trigona*, Costa Rica 3571.
Phages, morphology, ultrastructure, isolation, *Apis mellifera*, *Bacillus* larvae 8138.
Phagestimulants, hematophagy, reviews, *Arthropoda* 492.
Phagocytosis, blood cells, hemolymph, *Drosophila melanogaster*, *Drosophila yakuba* 2542.
 epithelium, midgut, larvae, cytology, *Tenebrio molitor* 103.
Phagolastus bouceki, new species, morphology, host plants, Mascarene Is., Reunion I. 4877.
Phalacrocorax auritus, parasites, abundance, Mallophaga, *Acarina*, USA, Florida 5948.
Phalaenophana extremalis, morphology, larvae 7264.
Phalaenophana pyramusalis, phylogeny, morphology, larvae, *Phalaenophana extremalis* 7264.
Phalantias, new species, taxonomy, morphology, 6 species, India, Sri Lanka 4808.
Phallophora, taxonomic revision 4835.
Phanococcus citri, pest outbreaks, biological control, parasites, *Leptomastix dactylopii* 675.
Phanoperla, taxonomic revision, morphology 4905.
Phanoperla ciaggi, taxonomic revision, nomenclature 8002.
Phantia ferganensis, new records, geographical distribution, Turkey 4735.
Phaonia aserrans, new species, taxonomy, morphology, USSR, Siberia 6393.
Pharmokinetics, toxicity, insecticides, *Phaedon cochleariae* 1019.
Phase transition, flight muscle mitochondria, temperature effects on, *Schistocerca gregaria* 5709.
Phase variations, larvae, physiology, *Spodoptera exempta* 577.
Phaseolus lunatus, pest resistance, *Empoasca kraemeri* 4592.
Phaseolus, association, new species, *Acanthoscelides comptus*, *Acanthoscelides caracallae*, Argentina 3186.
Phaseolus aureus, host plants, pest control, oils, *Bruchus chinensis* 6929.
Phaseolus lunatus, crop yield, damage effects on, *Nezara viridula* 1456.
 pest resistance, population genetics, damage, *Empoasca kraemeri* 8459.
Phaseolus vulgaris, crop fields, population dynamics, *Empoasca kraemeri*, Brazil 6044.
 crops, damage, feeding, *Diabrotica balteata*, *Ceratomya facialis* 4609.
 cultivars, pest resistance, *Zabrotes subfasciatus* 8578.
 damage, larvae feeding, pests, *Ostrinia nubilalis* 8571.
 fitness components, fecundity, environmental effects 770.
 host plants, air pollution effects on survival, *Epilachna varivestis* 2153.
 host plants susceptibility, air pollution effects on, *Epilachna varivestis* 6782.
Phasgonophora nuctata, parasitoids, life cycle, *Agrilus bilineatus*, USA, Wisconsin 2016.
Phasiandae, parasites, biometrics, morphology, *Goniodes dispar*, *Menopon pallens*, *Cuclotogaster heterographus*, *Cuclotogaster heterogrammus*, *Goniodes colchici*, Spain, Cordoba 8045.

- Phasmatum colchicum**, taste aversion, defense mechanisms, Coccinellidae 9120.
- Phasmididae**, walking, coordination 115.
- Phasmida**, developmental stages identification, body length 6494, fossils, wings, morphology, Cretaceous period, Greenland 4752, spermatophores, occurrence, geographical distribution 5805.
- Phaenocarpa flammula**, nuclear polyhedrosis virus infection, symptoms 290.
- Phaulacridium vittatum**, population genetics, color polymorphism, clines 2344.
- Phaeole**, association, host plants evolution, Byttneria aculeata 7554, food organisms, predation efficiency, Macrodon quinquevittatus 2804, predation, seeds, forests, Costa Rica 7604, predators, biological control, eggs, Diabrotica, Costa Rica 2993, taxonomic revision, synonymy 6430.
- Phaeole dentata**, chemical control, effects on association, Diatraea saccharalis 609, defensive behavior, Apocephalus parasites effects on, competition, Solenopsis 3576.
- Phaeole ferdia**, caste determination, juvenile hormone, activity, corpora allata 7477.
- Phaeole floridana**, chemical control, effects on association, Diatraea saccharalis 609.
- Phaeole lania**, colonies, ecological distribution, habitat, USA, Texas 6986.
- Phaeole megacephala**, abundance, Aonidiella auranti pest control effects on 2879, role, Phytophthora palmivora dispersal 9327.
- Phenacoccus herreni**, morphology, new species 1194.
- Phenacoccus manihoti**, eggs, predators, feeding behavior, Dicrodiplois manihoti, Africa 1624, interspecific relationships, parasites, associations, Congo 1222, life cycle, biology, ecology, South America 440, life history, biology, natural enemies, biological control, Africa 1194, pest outbreaks, pest control, Nigeria 1416.
- Phenacoccus surinamensis**, morphology 1194.
- Phenobarbital**, enzymes, glutathione transferase, activity, induction, toxicity, Musca domestica 5783.
- Phenobarbital**, effects on mercapturic acid biosynthesis, Musca domestica 3432.
- Phenococcus burgae**, vectors, plant diseases, abundance, Ghana 1260.
- Phenol**, repellents, pest control, Dysdercus koenigii 7340, toxicity, Lycopersicon esculentum foliage, Heliothis zea 5793.
- Phenolics**, plant extracts, antifeedants, feeding stimuli, Morus, Bombyx mori 7529.
- Phenology**, abundance, Scotiidae, USA, Texas, Rio Grande Valley 1975, adaptations, population studies, Diatraea grandiosella 6831, aggregation, reproduction, Euploea core corina, Australia 7581, Aphididae predators, Chrysopidae, Coccinellidae, Syrphidae, British Isles, England 8392, Apiocera exta, Apiocera hispida, Apiocera huxleyi atrifasciata, Apiocera pearcei, Rhabdomidas aitkeni, USA, California 9087, association, pests, population dynamics, Olyce max, Nezara viridula 8351, collections, Hungarian Natural History Museum, Olipa, Palearctic Region 8674, division, embryogenesis, Laspeyresia ponomelii 8215, emergence, community composition, abundance, Chironomidae, Canada, Alberta, Bigory R. 752, Empididae, Dolichopodidae, Germany, Fed. Rep. 3865, environmental effects, photoperiods, emergence, Tricoptera, Austria 1864, flight activity, migrations, Rhopalosiphum padi, Sitobion avenae, Metopolophium dirhodum 6826, flight activity, Trioxylon attenuatum, Trypoxylon figulus 9098, flowering, host plants, effects on infestation, Frumeta nudinella, Solanum carolinense 2839, flowering, host plants, pollination, Insects, USA, Missouri 2047, flowering, pollination effects on, Brassica napus oleifera, Apis mellifica 4582, flowering, pollination, Linaria vulgaris, Insecta 5203, flowering, pollination, Pisonia coccinifera, Apidae, Brazil 4412, flowering, pollination, Rollinia mucosa, Chrysomelidae, Brazil 4410, flowering, pollination, Solanum palmarum 4411, flowering, pollinators population dynamics, Yucca whipplei, Tegetula maculata 8447, flowering, Spirea vanhouttei, Aesculus hippocastanum, Robinia pseudacacia, Hibiscus syriacus, soil temperature, development, oviposition, Astenus spretulus 1867, food preferences, food plants, larvae, Lepidoptera 2845, geographical distribution, Monobia, USA, Texas, Mexico 2369, geographical distribution, species composition, Geometridae, Italy 7116, habitat preferences, Castanea crocata, Castanea floridana, USA, Florida 1863, host plants, association, abundance, Ceanothus crassifolius, Miridae 5953, host plants, effects on species richness, abundance, Lepidoptera, Finland 9162, host plants flowering, pollination, community structure, Bombyx 1258, host plants leaves, effects on growth, Hissipae 615, host plants, Opilia americana, Decus oleae, Australia 3626, host plants, parasitoids, population decline, Xanthoxenus politum, USA, New Jersey 2034, infestation, host plants, Smicronyx, Cuscuta, Pakistan 9157, infestation, Vigna unguiculata, Maruca testulalis 2052, life cycle, bogs, Chaoborus, USA, Michigan 7015, life cycle, Graphophora, life cycle, mathematical models, Choristoneura fumiferana 8285, life cycle, Pterostichus panzeri, Austria 6708, morphology, behavior, Apis mellifera, seeds, Trifolium repens 1970, morphology, sexual reproduction, diapause, seasonal variations, Lisonotus bonariensis, New Zealand, Canterbury 1104, nymphs, diets, habitat selection, streams, Stenacron inter punctatum, Stenonema
- Phenology (continued)**, pulchellum 3052, population dynamics, coloration, Saissetia oleae, Israel 9178, population dynamics, temperature effects on development, Spodoptera frugiperda 6031, population ecology, Muelkenella 3633, population-environment relations, Culiseta inornata, USA, California 9221, surveys, Geometridae, Italy 3143, taxonomy, classification, Andrena, Japan 6433, telamona monticola, USA, Delaware 9112.
- Phenols**, chemical properties, host plants, host selection, Populus angustifolia, Pemphigus betae 8345, diets, cuticle incorporation, Anacardium melanorrhodon 7284, nutrients, food plants, herbivores, Anacardium melanorrhodon 7308.
- Phenothrin**, dose response effects, Aedes taeniorhynchus, Anopheles quadrimaculatus, Musca domestica, Stomoxys calcitrans 1401.
- Phenotypes**, adaptations, canalization, Nymphalis antiopa hyperborea 7878, alatum nymphs, population growth, crowding, host plants, Sitobion avenae 6023, classification, morphology, 33 species, Dichroplus 8892, cocoons, physical properties, selection, Bombyx mori 9427, colonial characteristics, selection, Apis mellifera, Canada, Alberta 9433, conditioning, central excitatory state, hybrids, genetics, Phormia regina 6277, diets effects on, Lepidoptera 3374, indicators, econoxys, biochemistry, lipoproteins, Isotoma uigna 4155, inheritance, population genetics, nigrescens, Pachyemema hippocastanana 6285, larvae, polymorphism, Aetysveche grandis, USA, Montana, Flathead R. Basin 1714, lethality, notch gene, Drosophila melanogaster 3101, morphology, occurrence, Colias cesonia, USA, 7269, morphology, selection, Drosophila melanogaster 2341, mosaics, mutants, Drosophila melanogaster 1535, sympatric populations, Apodemia mormo, USA, Arizona, Santa Cruz Co. 6878, temperature-sensitive mutant, wings, Drosophila melanogaster 1533.
- 5-(4-Phenoxypheoxy)-methyl-1,3-benzodioxole, growth regulators, chemical control, pests, stored products 9331.
- Phenyl carbamates**, chemical control, Nephrotix 2945, chemical control, Orsolia oryzae 2994, chemical control, Trypoxylon incertulas 2999.
- 4-Phenyl phenol, repellents, pest control, Dysdercus koenigii 7340.
- Phenylalanine**, m-tyl-N-methylcarbamate, effects on oxidation, Bombyx mori 7317.
- Phenylpirazine**, antifeedants, Euxoa messoria 8970.
- Pherbellia**, morphology, taxonomy, geographical distribution, North America 3203.
- Pherbellia borea**, new species, taxonomy, morphology, North America 5571.
- Pherbellia californica**, new species, taxonomy, morphology, North America 5571.
- Pherbellia griseocollis**, synonymy, Pherbellia lapponica 5572.
- Pherbellia hackmani**, new species, taxonomy, morphology 5572.
- Pherbellia lapponica**, synonymy, Pherbellia griseocollis 5572.
- Pherbellia lutheri**, new species, taxonomy, morphology 5572.
- Pherbellia marthae**, new species, taxonomy, morphology, North America 5571.
- Pherbellia obscura**, morphology, geographical distribution, North America 3203.
- Pherbellia paludum**, new species, taxonomy, morphology, North America 5571.
- Pherbellia stylifera**, new species, taxonomy, morphology 5572.
- Pherbellia subtilis**, morphology, taxonomy, North America 3203.
- Pherbellia suscipia**, new species, morphology, taxonomy, North America 3203.
- Pherbellia urticula**, new species, taxonomy, morphology, North America 5571.
- Pherbellia ventralis**, morphology, taxonomy, North America 3203.
- Pherbia coryleti**, taxonomy, morphology, geographical distribution, Belgium 6323.
- Pherbina intermedia**, taxonomy, morphology, geographical distribution, Belgium 6323.
- Pherbina mediterranea**, taxonomy, morphology, geographical distribution, Belgium 6323.
- Pherbina testacea**, taxonomy, morphology, geographical distribution, Belgium 6323.
- Pheromone emission**, calling behavior, Pseudaletia unipuncta 5873, precocene II topical application, attractancy, Ceratix capitata 8099, prostaglandins, reproductive organs, Trichoplusia ni 8097, sex pheromone, males response, Brachymeria lasus 2754, sex pheromone, neurophysiology, Lymantria dispar 5699.
- Pheromone traps**, aggregation pheromone, sulcatol, surveys, Gnathotrichus sulcatol, Canada, British Columbia, Vancouver I. 5387, attractancy, males, Decus oleae 3006, attractancy, pests, Sesuidae, USA, Mississippi 3786, attractancy, population levels, Homocidus electellum 5702, attractancy, population studies, Trypandendron lineatum 5704, attractancy, Synanthedon pictipes 7338, attractants, efficacy, pest control, Melissopus latiferrans 740, attractants, electroantennograms, Tehama bonifatiella 5701, attractants, population studies, Cydia nigricana 2492, attractants, seasonal variations, Agrotis sepium, Japan 2227, attractants, Sperchya intractans 1933, attractants, Trichoplusia ni, sex pheromone, Scirtes orbiculatus 1787.

Pheromone traps, (continued)

behavior response, threshold limits, males, *Grapholitha molesta* 420.
biological control, efficacy, comparative studies, *Scolytus scolytus*, *Scolytus multistriatus* 1464.
capture efficiency, density, saturation, age, monitoring, *Choristoneura* 1679.
catches, variations, *Scotogramma trifoli*, Canada, Manitoba 4337.
catching methods, lures, trap height, *Popillia japonica* 8499.
catching methods, modification, *Choristoneura fumiferana* 4593.
catching methods, sex pheromone, *Agrotis ipsilon* 2244.
chemical control, insecticides timing, flight activity, *Synanthedon rhododendri* 700.
chemicals, *Croesia sempurpurana* 2095.
cost, effects on efficacy, *Podestria syringae* 2248.
control programs, *Earias insulana* 2078.
control programs, pest outbreaks detection, *Heliothis armigera* 6183.
design, *Anthonomus grandis* 6183.
efficacy, biological control, *Ips typographus* 706.
efficacy, *Chrysoteucha topiana* 2226.
efficacy, comparative studies, *Ostrinia nubilalis* 596.
efficacy, *Ips* 2194.
efficacy, longevity, *Synanthedon pictipes* 2230.
efficacy, lures, attractancy, *Pteropax*, *Scolytidae* 3803.
efficacy, pest control, *Heliothis zea* 1475.
efficacy, population density estimation, *Spodoptera erugis* 2238.
efficacy, population studies, *Choristoneura fumiferana* 3753.
efficacy, spatial distribution effects on, *Trypandron* 9302.
efficiency, design, males, *Pectinophora gossypiella* 2477.
factors affecting efficacy, pest control, *Cydia pomonella* 5347.
methodology, measuring techniques, flight activity, *Tortricidae* 472.
monitoring, populations, *Conopsea myosepiformis*, Italy 2889.
occurrence, abundance, *Hyurgonius rufipes*, *Scolytus tsugae*, Canada 1183.
penetration-B, sex pheromone, attractancy, *Periplaneta americana* 5007.
pest control, *Agrotis ipsilon* 6938.
pest control, conferences, *Insecta* 9503.
pest control, fruit trees, *Insecta* 2992.
pest control, mating behavior disruption, *Ameylois transitella* 8507.
pest control, population dynamics, *Prays citri*, Israel 4594.
pest control, research programs, *Agrotis ipsilon*, USA 8574.
pest control, *Scolytus multistriatus* 2228.
pest control, socio-economic aspects, *Spodoptera litoralis*, Egypt, Arab Rep. 8490.
pest control, synthetic sex pheromone, *Homona magnanima* 3026.
population levels, correlation, infestation, *Prays oleae*, Spain, Granada 9281.
population levels, flight activity, *Conopsea myosepiformis* 9953.
sampling, *Orygia thyellina*, *Orygia recens*, *Orygia antiqua* 8614.
sampling, pests, *Spodoptera frugiperda*, Canada, Ontario 5555.
sex pheromone, biochemical analysis, *Buseola fusca* 3354.
sex pheromone, capture-recapture studies, simulation models, *Plutella xylostella* 218.
sex pheromone dose, communication disruption, *Grapholitha molesta* 415.
sex pheromone, efficacy, *Anticarsia gemmatilis* 1924.
sex pheromone, efficacy, *Ostrinia furnacalis* 1778.
sex pheromone, methodology, *Grapholitha molesta* 57.
sex pheromone, methodology, *Prays citri*, Israel 862.
stored products, occurrence, *Pyralidae*, Czechoslovakia 9294.
surveys, population density, *Pseudoplua* includes, *Rachipolusia* or, *Trichoplusia* m., *Trichoplusia oxygramma*, USA, Louisiana 8516.
surveys, sampling, geographical distribution, *Diprion similis*, USA, North Carolina 8552.
surveys, *Spodoptera litura*, Japan 2229.
synthetic pheromones effects on catches, *Synanthedon* 1383.
Trypandron 701.
weeds, catching methods, *Trypandron lineatum*, *Gnathotrichus retusus* 8573.

Pheromones, (continued)
attractancy, conspecifics, *Aponomea hydrosauri* 7332.
attractancy, interspecific relationships, *Schinia mitsi*, *Spodoptera eridania* 5120.
attractancy, sterilized organisms, *Lycantria dispar* 5872.
attractancy, (E)-9-oxo-2-decenoic acid, *Apis mellifera* 4533.
attraction, interspecific relationships, *Dendroctonus brevicornis*, *Ips paraconfusus* 1929.
behavior response, threshold limits, males, *Grapholitha molesta* 420.
biochemical analysis, synergism, chemotaxis, predator-prey interactions, *Thanasimus formicarius*, *Ips typographus*, *Thanasimus formicaris* 422.
biochemical characteristics, *Tetranorium impurum* 3548.
biosynthesis, digestive tract, *Ips paraconfusus* 1786.
biosynthesis, juvenile hormones effects on, *Dendroctonus frontalis* 5700.
biosynthesis, localization, fat body, *Anthonomus grandis* 4167.
biosynthesis, precursors exposure, *Ips paraconfusus* 1784.
biosynthesis, streptomycin effects on, *Ips paraconfusus* 3352.
catabolism, antennae, olfaction, *Trichoplusia* n. 4168.
catabolism, molting effects on, *Trichoplusia* n. 227.
catching methods, traps, *Anthonomus grandis* 702.
chemical communication, chemoreception, *Yalomma dromedarii* 6686.
chemical communication, food sources, recruitment, *Tetranorium impurum* 3840.
chemical communication, *Insecta* 4310.
chemical communication, social behavior, *Periplaneta americana* 5119.
chemical composition, sex pheromone, *Malacosoma distrita* 223.
chemicals, sumuli, antennal sensilla, electrophysiological recording, *Yponomeuta* 4143.
concentration, pest control, effects on mating, *Heliothis zea* 4610.
degradation, enzymatic activity, cuticle, *Trichoplusia* n. 4169.
deterrents oviposition, intraspecific relationships, resource partitioning, *Dacus cucurbitae* 5850.
dispersion, effects on larvae, intraspecific relationships, *Blattella germanica* 1161.
effects on males activity patterns, interspecific relationships, *Dietyoploca japonica*, *Philosamia cynthia* 2761.
effects on mating behavior disruption, pest control, *Ameylois transitella* 2219.
effects on maturation inhibition, *Solenopsis invicta* 390.
enantiomers, attractancy, *Dendroctonus frontalis* 4313.
exocrine glands, ultrastructure, *Dermacentor variabilis* 2614.
feces, aggregation, sympatric populations, *Tipula* acuta, *Tipula simplex*, USA, California 6721.
females, photoperiods, males, effects on, *Trichoplusia* n. 1881.
flight activity, stored products pests, *Pyralidae*, *Gelechiidae* 7663.

Pheromones, (continued)

fruit-marking pheromone, production, site location, *Rhagoletis pomonella* 3353.
glands, anatomy, males, *Eldana saccharina* 5017.
host selection, colonization, reviews, *Scolytidae* 6684.
inhibitors, pest control, *Dendroctonus frontalis*, *Ips avulsus* 3788.
mandibular glands, biochemical analysis, *Andrena hancornia* 3351.
mandibular glands, olfactory communication, *Myrmica* 5867.
Nasonov gland, attractancy, workers, *Apis mellifera* 5115.
olfactory perception, electroantennograms, *Ostrinia nubilalis* 1739.
olfactory perception, strains, effects on behavior, *Trogoderma granarium* 1157.
oviposition deterrents, host plants, competition, *Hylymya* 5856.
oviposition deterrents, intraspecific relationships, *Rhagoletis basiola* 1920.
oviposition deterrents, parasites, hosts plants, *Hylymya* 528.
oviposition deterrents, persistence, *Plaris brassicae* 217.
oviposition deterrents, population density, *Atherigona soccata* 1908.
oviposition deterrents, *Rhagoletis zephyria* 8971.
oviposition suppression, chemoreceptors, morphology, electrical properties, *Rhagoletis pomonella* 4136.
pest control, crops, status 1453.
pest control, *Insecta* 3710.
polythetic behavior, foraging behavior, recruitment, defensive behavior, *Nasutitermes coniger* 6685.
production regulation, chemical composition, *Apis mellifera* 212.
queens, effects on castes, social behavior, *Apis mellifera* 3044.
queens, effects on swarming behavior, *Apis mellifera* 746.
queens, effects on workers survival, *Apis mellifera* 4647.
recognition, nests incompatibility, colonial characteristics, *Pseudomyrmex ferruginea* 7799.
response, sexual behavior, bioassays, males, *Dioryctria amatella* 400.
role, pest control, environment management, *Insecta* 3797.
sensitivity, bioassays, *Solenopsis invicta* 1162.
stridulation, geographical distribution, new species, *Dacus opillae*, Australia 821.
survival, survivor, foot-pest pheromone, *Apidae* 3350.
swarming behavior, aggression, workers, *Atta*, *Acromyrmex* 4651.
synthetic, chemical composition, pest control, conferences, *Insecta* 9503.
synthetic, catching methods, swarms, apiculture, *Apis mellifera* 5292.
synthetic, dispersion, efficacy 2203.
synthetic, trapping, *Trypandron* 701.
synthetic, (Z,Z)-3,13-octadecadien-1-ol acetate, effects on pheromone traps catches, *Synanthedon* 1383.
trans-9-oxo-dec-2-enoic acid, secretions, queens, *Apis mellifera* 225.
traps, catching methods, *Scolytidae* 64.
traps, comparison, capture efficiency, *Ips typographus*, Sweden 719.
vision, effects on mating behavior, *Heliothis zea* 4291.
visual stimuli, mating behavior role, *Heliothis zea* 8253.
volatiles, chemical analysis, *Apis mellifera* 8116.
workers recruitment, foraging behavior, *Myrmica rugulosa* 5169.

Phidippus,
antifeedants, defence secretions, *Chauliognathus* 2612.
Phidippus audeas,
predators, feeding behavior, prey, *Rhinocyllus conicus*, USA, Virginia 1200.
Phidippus femoratus,
mate selection, courtship 6663.
Phidippus jolissomii,
mating behavior, sexual selection 404.
Phigalia plummaria,
life cycle, host plants damage, pest control, *Purshia tridentata*, USA, Utah 3025.
Philosamia spumarius,
coloration, population studies, hemolymph protein composition 8945.
pests, damage, yield, crop fields, *Medicago sativa* 8561.
Philanthus barbatus,
nesting behavior, territorial behavior, aggregation behavior 9360.
Philanthus triangulum,
venom, biochemical analysis 4215.
venom, effects on glutamate uptake, muscles, *Schistocerca gregaria* 5768.
venom, effects on neurophysiology, *Periplaneta americana* 4217.
Philosamia cynthia ricina,
inters, DNA biosynthesis, RNA biosynthesis, protein composition, silk gland 2727.
Philippines,
crop protection, integrated control, economics, insecticides, *Oryza sativa* 5391.
medical importance, vectors, *Getah virus*, *Culex vishnui* 1378.
morphology, geographical distribution, new records, *Nyctenibidae* 1579.
morphology, keys, geographical distribution, *Nycteniboscinae* 871.
new records, *Serromyia eskaki* 7964.
new species, *Aradus denticulatus* 8810.
new species, *Oribatida* 7139.
new species, parasites, *Trombiculidae*, *Rousettus amplexicaudatus*, *Rallus torquatus* 794.
new species, taxonomy, morphology, *Anthrribidae* 7942.
new species, taxonomy, morphology, *Baryconus dudichi* 7986.
new species, taxonomy, morphology, *Pseudocloa* *atoki* 7191.
new species, taxonomy, morphology, *Rachana circumdata*, *Rachana circumdata panayensis*, *Deudorix hypargyria philippinensis* 4891.
new species, taxonomy, morphology, *Tanacococcus visayanus* 4890.
poultry infestation, identification, *Ornithonyssus bursa* 2925.
Philippines, Negros I.,
new species, taxonomy, morphology, *Discophora dodong* 4889.
Philippines,
biological control, pests, *Homoptera* 1451.
Philippines,
new species, *Pseudostegana* 3990.
taxonomic revision, new species, 5 species, *Eostegana* 3989.
Phiodromus capitum,
population levels, statistical analysis 9176.
Philonthus,
new species, morphology, geographical distribution, New Guinea 2398.
predation, abundance, *Haematobia irritans* 3606.
Philonthus basiliars,
predation, conspecifics, cannibalism 6740.
Philonthus coprophilus,
new records, geographical distribution, German Dem. Rep., Potsdam, Rietzer See 4711.
Philonthus cruentatus,
predation, predator-prey interactions, *Haematobia irritans* 3606.

- Phloothus flavilimbatus**, predation, predator-prey interactions, *Haemaphysalis irritans* 3606.
- Phloothus longicornis**, life history, development, reproduction 6726.
- Phloothus minor**, life history, reproduction, longevity, fecundity 6708.
- Phloothus parvus**, new records, geographical distribution, German Dem. Rep., Potsdam, Rietzer See 4711.
- Phloothus politus**, defense secretions, chemical composition, New Zealand 247.
- Phloothus rectangulus**, predation, predator-prey interactions, *Haemaphysalis irritans* 3606.
- Phloothus tritubus**, life history, reproduction, development 6709.
- Phloothus yemenicus**, new species, Yemen 3187.
- Phloothus montanus**, life cycle, oviposition, streams, British Isles, Lake District 2794.
- Phloothus**, parasites, morphology, Spain 8046.
- Phloothia cythia**, fat body, temperature, glycogen phosphorylase, glycogen synthase, activity 6563. males activity patterns, pheromones effects on, interspecific relationships, *Drosophila melanogaster* 2761.
- Phloothia cythia ricala**, silk gland, tRNA Ala purification 3872.
- Phloothia cythia ricala**, rRNA 5S, nucleotide sequence, relationship, evolution 8092. silk gland, rRNA 5.8S, nucleotide sequence 9388.
- Phloothia ricala**, larval, pathology, Viruses, nuclear polyhedrosis virus, *Mythimina separata* 1813.
- Phloothia ricala**, indicator species, brain hormones bioassays, methodology 7330.
- Phloothidae**, taxonomy, morphology, East Africa 4063. taxonomy, phylogeny, biogeography 4909.
- Phloothypis cephalae**, new species, morphology, Mascarene Is., Reunion I. 4877.
- Phloothypis josephi**, new species, taxonomy, morphology, India 8830.
- Phlooths**, visual discrimination, wavelength, photoreceptors, filters 8920.
- Phloothridae**, new species, taxonomy, morphology, *Apterygodes gilvipes*, Canary Islands 849.
- Phloothus**, disease transmission vectors, aging methods 4493. traps, methodology, efficiency 47.
- Phloothus**, activity patterns, light effects, Yugoslavia 2766. chemical control, malathion, rain forests, Panama 1831. disease transmission, leishmaniasis 2914. marking methodology, blood meals, radioisotopes 6469. vectors, *Leishmania donovani*, Kenya 1335.
- Phloothus acuminatus**, new species, taxonomy, morphology 3195.
- Phloothus affinis**, host preferences, disease transmission, Kenya 1335.
- Phloothus africanus**, host preferences, disease transmission, Kenya 1335.
- Phloothus antennatus**, host preferences, disease transmission, Kenya 1335.
- Phloothus ariasi**, population levels, sampling, methodology 59.
- Phloothus bedfordi**, host preferences, disease transmission, Kenya 1335.
- Phloothus chinensis longiductus**, new records, geographical distribution, China, People's Rep., Szechuan Province 2422.
- Phloothus mackerrai**, new species, taxonomy, morphology 3195.
- Phloothus martini**, breeding, life cycle, visceral leishmaniasis vectors, Kenya 8286. feeding behavior, host preferences, breeding 3567. host preferences, disease transmission, Kenya 1335.
- Phloothus papatasi**, population structure, distribution, disease spread, historical account, Yugoslavia, Serbia 602. susceptibility, infection, bluetongue virus 3412.
- Phloothus pedifer**, midgut, pathology, infection, *Leishmania aethiopica* 8157.
- Phloothus perilliewi perilliewi**, population genetics, enzymatic activity, reproductive isolation, Italy 3133.
- Phloothus perniciosus**, population levels, sampling, methodology 59.
- Phloothus rothmani**, morphology, South Africa 1627.
- Phloothus rostratus**, new species, morphology, South Africa 1627.
- Phloothus rudhali**, host preferences, disease transmission, Kenya 1335.
- Phloothus schwartzi**, host preferences, disease transmission, Kenya 1335.
- Phloothus sergenti**, population structure, distribution, disease spread, historical account, Yugoslavia, Serbia 602.
- Phloothus linnariae**, bionomics, life cycle 9115. morphology, sex determination, adults 2508.
- Phlogisinae**, taxonomy, revision, new families, Cicadellidae, Africa 829.
- Phobereochetrus**, synonymy, *Acuminochetrus* 5552.
- Phoca vitulina**, hosts, new records, parasites, *Halarachne halichoeri*, USA, Alaska 4385.
- Phoebe sennae**, migration, weather, synoptic-scale wind systems, USA, Florida 5978.
- Phoenicopterus ruber**, parasites, species composition, Spain 8336.
- Phoenis dactylifera**, fumigation, phosphine, mortality, Insecta 8535.
- Pholeioides canisuga**, vectors, rabies virus, Vulpes 8414.
- Pholeioides hexagonus**, vectors, rabies virus, Vulpes 8414.
- Pholeioides rugicollis**, disease reservoirs, rabies virus, virulence, Mustela 7633.
- Phonogaster longigeniculata**, new species, taxonomy, morphology, China, People's Rep. 4904.
- Phonotaxis**, auditory communication, social environment effects on, *Palmacoxia nana* 9077. landing behavior, orientation, *Scaptomyza aletus* 1926. song, aggregation, *Gryllus integer*, *Gryllus veletus*, *Teleogryllus oceanicus* 7499.
- Phora speighti**, new species, taxonomy, morphology, Ireland 6391.
- Phoracantha semipunctata**, larvae, gastrointestinal tract, enzymatic activity, vitamin B biosynthesis 941.
- Phorate**, insecticides, circadian rhythms, enzymatic activity, *Acheta domesticus* 1794. insecticides, metabolites toxicity, *Aphis fabae* 5777. insecticides, systemics, toxicity, pesticide residues, *Aphis gossypii* 7413. pesticide residues, soil, degradation, temperature, bioassays, *Drosophila melanogaster* 7402.
- ¹⁴C-phosphate**, insecticides, toxicity, *Myzus persicae*, *Brevicoryne brassicae* 2658.
- Phoreception**, circadian rhythms, *Coccinella septempunctata*, *Aphis* 8923.
- Phoresy**, association, *Scotocryptini*, *Meliponinae*, Panama 5227. genital tract, *Humaphelenchoides*, *Acrostechus*, *Anthophora bomboidea*, *Halictus ligatus*, *Halictus farinosus* 1213. interspecific relationships, *Bezzia bivittata*, *Leptus*, *Dasyhelea oppressa*, *Digamastellus* 6040. reviews, *Scotocryptini*, *Meliponinae*, Neotropical Region 9130.
- Phoretic behavior**, carriers preferences, genetic variance, *Psephenochirus acrophori* 8663.
- Phoretic behaviors**, morphology, females, *Varron jacobsoni* 4110.
- Phorididae**, development, association, species composition, fungi, British Isles 9107. larvae, association, fruit bodies, fungi 538.
- Phormia regina**, age, nutrition, effects on chemoreception, odors 7530. appetitive conditioning 9078. photoreceptors, wings, feeding behavior, electrophysiological recording 1737. feeding behavior, chemoreception, anatomy, electrophysiological recording 914. food preferences, salts, chemoreception, reproduction, females 7296. genetics, hybrids, conditioning, phenotypes, central excitatory state 6277. salivary gland, serotonin induced secretion, calcium transport 1798.
- Phormia terraenovae**, visual perception, motion, neurophysiology 7304.
- Phorodon humuli**, biological control, predators, mass rearing, *Anthrenus nemorum* 2259. pesticide resistance, deltamethrin, enzymatic activity 2657. plum pox virus vectors, flight activity, orchards 3835. toxicity, insecticides, pest control 9028.
- Phorocidia studii**, webs, structure, design, prey attractancy 2790.
- Phosalone**, acaricides, efficacy 7404.
- Phosphamidon**, insecticides, weathering, effects on efficacy, *Epilachna vigintioctopunctata* 7712.
- Phosphatidylinositol**, hydrolysis, calcium channels, salivary gland, Insecta 4950.
- Phosphene**, fumigants, uptake, metabolism, susceptibility, resistance, radioisotopes, pest control, *Rhizophora dominica* 1044.
- Phosphine**, fumigation, effects on productivity, *Trogoderma granarium* 5763. fumigation, pest control, stored products, Insecta 2241. fumigation, *Phoenis dactylifera*, mortality, Insecta 8535. methyl bromide, fumigation, pests, stored products, *Tribolium castaneum* 6627. pesticide resistance, fumigants effects on fecundity, pest control, *Tribolium castaneum* 7692. resistance, chemical control, *Tribolium castaneum* 1046. toxicity, *Drosophila melanogaster* 5031. toxicity, stored products pests, Insecta 1050. toxicity, stored products pests, Insecta 1051. toxicity, 7 species, Coleoptera 1073.
- Phosphodiesterases**, biochemical analysis, *Drosophila melanogaster* 3912.
- Phosphoglucomutase**, genes, polymorphism, *Mansonia crassipes*, *Mansonia uniformis* 7872.
- Phospholipase A₂**, venom, queens, workers, *Apis mellifera* 3431.
- Phospholipid composition**, diets, carbohydrates, *Exenterus roborator* 3313. glycolipid composition, pupae, *Bombus morio* 166.
- Phosphorus**, localization, golgi apparatus, fat body, spectroscopy (photoelectron), Insecta 8937. nutrient dynamics, sewage effluents, streams, community structure, Insecta, USA, Virginia 7814.
- Phosphorus virescens**, chemical control, gammalin, Nigeria 3002.
- Phosphorylase**, enzymatic activity, fat body, hormones, calcium effects on, *Periplaneta americana* 1759. metabolism, Insecta 3321.

opyriazation, enzymes activity, 3-hydroxy-3-methylglutaryl coenzyme A reductase, *Manduca sexta* 6562.
Phobius luciferin 4-mono-oxygenase (ATP-hydrolyzing), immobilized enzymes, kinetics, stability, *Luciola mungolica* 8934.
Phobius pennsylvanica, luciferase, isoenzymes, characterization 938.
Phobius pyralis, luciferase, isoenzymes, characterization 938.
 vision, eye, bioluminescence 132.
Photoaffinity labelling, juvenile hormone-binding protein, *Leucophaea melanar* 8933.
Photocasts, mutants, visual stimuli, courtship, *Drosophila melanogaster* 4689.
Photography, methodology, equipment, Insecta, Araneae 7249.
 methodology, flight activity 6468.
 methodology, Insecta 5631.
Photokinetics, activity patterns, habitat preferences, *Tribolium castaneum*, *Tribolium confusum* 2787.
 light, effects on locomotor activity, *Tribolium castaneum*, *Tribolium confusum* 5127.
Photoperiod, circadian rhythms, oviposition, *Ostrinia nubilalis* 9045.
 circadian rhythms, photoreceptors, reviews, Insecta 8922.
 diapause, coloration, seasonal variations, *Lyoneeta clerkei* 2773.
 diapause induction, diapause termination, genetic control, *Diatraea grandiosella* 5076.
 diapause, phenology, population studies, *Diatraea grandiosella* 6831.
 diel variations, mating behavior, *Chilo suppressalis* 2743.
 effect on pest resistance, host plants, *Lypercossus hirsutum*, *Manduca sexta* 9340.
 effects on breeding, life cycle, *Armadiolidium vulgare* 6643.
 effects on corpora allata activity, *Pterostichus nigrita* 2700.
 effects on development, morphogenesis, *Euschistus tristigmus* 7462.
 effects on diapause, *Aelia acuminata* 7461.
 effects on diapause, circadian rhythms, *Sarcophaga argyrosoma* 5815.
 effects on diapause termination, *Onus insidiosus* 5816.
 effects on dimorphism, color, pubescence, rearing, *Thyanta calceata* 5092.
 effects on dimorphism, life cycle, *Anaea andria* 7444.
 effects on polymorphism, pigmentation, energetics, *Megoura* 2699.
 effects on polymorphism, seasonal variations, *Lyoneeta clerkei*, Japan 5236.
 effects on sensitivity, insecticides, butonate, trichlorfon, *Musca domestica* 7419.
 entrainment, locomotor activity, circadian rhythms, *Pterostichus nigrita* 6694.
 environmental effects, development, diapause, *Curpish unpuncta*, *Laphygma exigua*, *Plusia gamma* 7470.
 environmental effects, locomotor activity, flight activity, *Locusta migratoria* 2541.
 feeding behavior, *Locusta migratoria* 8303.
 flight activity, circadian rhythms, *Culex pipiens quinquefasciatus* 8279.
 long-term effects, climatic conditions, development, *Pterostichus nigrita* 7443.
 metamorphosis, body size, *Labdomea chivkolski* 5087.
 receptors, light penetration, cuticle, *Megoura* 2533.
 regulation, reproduction cycles, *Armadiolidium vulgare* 7446.
 sensitivity, fat body development, diapause, *Hemipepla palmaria* 7419.
Photoperiods, summer diapause, hibernation, *Spilargia imparis* 7439.
Photoperiods, circadian rhythms, enzymatic activity, insecticides, phorbate, *Acheta domesticus* 1794.
 circadian rhythms, *Pteris brassicae* 917.
 diapause, effects on geographical distribution, phylogeny, biogeography, *Lepidoptera* 2136.
 diapause induction, emergence, hatching, *Acalopota luxuriosa* 1094.
 diapause induction, predators, diets, carotenoids, *Acari* 4257.
 diapause, *Leptinotarsa decemlineata* 3479.
 diel variations, circadian rhythms, sexual behavior, oviposition, *Culex quinquefasciatus* 1153.
 effects on diapause, circadian rhythms, *Tetranychus urticae* 3483.
 effects on, diapause induction, *Tetranychus urticae* 1095.
 effects on diapause termination, *Halophora ceratophylla* 1880.
 effects on, fertility, juveniles males, *Anagasta kuehneli* 1880.
 effects on larvae diapause, *Aedes triseriatus* 348.
 effects on larvae diapause, *Manduca sexta* 351.
 effects on locomotor activity, running, circadian rhythms, *Periplaneta americana* 918.
 effects on molting, *Heliconia melipomene* 1110.
 effects on pathogens, *Entomophthora phytomyzom*, *Hypera postica* 286.
 effects on summer diapause, *Antheraea yamamai* 3472.
 environmental effects, diapause, *Pectinophora gossypiella* 1096.
 environmental effects, phenology, emergence, *Triocarpa*, *Austria* 3864.
 environmental effects, rearing, locomotor activity, flight activity, *Locusta migratoria* 2541.
 males, effects on, calling behavior, pheromones, males, females, *Trichoplusia ni* 1881.
 neuroendocrine system, environmental effects, Insecta 3338.
 oviposition rhythms, external stimuli, *Drosophila melanogaster* 4262.
Photoreception, ecdysonic release, circadian rhythms, prothoracic gland, *Samia cynthia ricini* 8980.
Photoreceptors, acetylcholinesterase, histochemistry, eye, *Apis mellifica* 3299.
 cells, fluorescence, *Musca domestica* 4133.
 circadian rhythms, photoperiod, reviews, Insecta 8922.
 compound eyes, electrical properties, *Locusta migratoria* 3293.
 filters, visual discrimination, wavelength, *Phlebotomus* 8920.
 functional morphology, retina, anterior median eye, *Plexippus* 4971.
 mutation, pigments, rhodopsin, proteins, opsin, vitamin A, *Drosophila melanogaster* 1740.
 phototaxis, *Drosophila* 2539.
 physiology, light adaptations, *Apis mellifica* 6534.
 response, light intensity, adaptations, *Locusta migratoria*, *Valanga irregularis*, *Caloptera stygia* 4969.
 rhodopsins, ultrastructure, spatial distribution, eye, *Musca domestica* 4968.
 ultrastructure, sensitivity, diurnal variations, *Acrididae* 147.
Photoresonance, retinal deficiency effects on, *Bombix mori* 2767.
 role, bile pigments, *Lepidoptera* 2601.
Photosensitization, effects on polycyclic aromatic hydrocarbons toxicity, *Aedes aegypti*, *Simulium vittatum* 295.
Photoreynthesis, host plants, infestation effects on, *Tetranychus urticae*, *Fragaria vesca* 6163.
 parasites infestation effects on, *Aphis craccivora*, *Vigna subterranea* 528.
 pests, effects on host plants, *Pyrus communis*, *Bucculatrix pyrivorella* 7745.
 population-environment relations, pests, *Fragaria vesca*, *Tetranychidae* 2745.
 2060.
Phototaxis, dispersal, larvae, *Drosophyca cockerelli*, USA, Columbia R. 5435.
 escape behavior, mutants, eye pigmentation, *Drosophila melanogaster* 3096.
 feeding behavior, environmental effects, *Lucilia sericata* 7506.
 geotaxis, vertical distribution, *Drosophila* 2750.
 larvae, *Drosophyca cockerelli* 8606.
 light wavelength effects on, *Dendroctonus pseudotsugae*, *Trypandendron lineatum* 2753.
 parasites, host specificity, *Anodonta imbecilis* 5191.
 photoreceptors, *Drosophila* 2539.
 retinal deficiency effects on, *Bombix mori* 2767.
 suppression, host plants olfactory stimuli effects on, *Bombix mori* 3300.
 vertical migrations, larvae, *Chaoborus* 3619.
Phototoxicity, Ultraviolet, furanocoumarins, herbivores, *Oecophoridae*, *Papilionidae*, USA, New York 2079.
Photovision, bioluminescence cells, ultrastructure, enzymatic activity 995.
 bioluminescence, mimicry, predation, interspecific relationships 1303.
 larval, hemolymph, midgut, extracts, cardiotoxins, *Mollusca* 9018.
Photuria lachrymans, courtship, bioluminescence, visual communication, neurophysiology 5848.
Photuris vesicularis, electrical stimulation, control neurons, flashing, males 994.
 electroretinograms, compound eyes, wavelength sensitivity, bioluminescence 2540.
 flashing patterns, central nervous system organization effects on 265.
Phragmites albidus, instars, morphology, pests 4100.
 new records, geographical distribution, Greece 4731.
Phratra, keys, morphology, USSR 6482.
Phratra atrovirens, morphology, larvae 6482.
Phreatophila, insecticides, pesticide resistance, detoxification mechanisms, *Musca domestica* 1056.
Phrioclypeus occidentalis, geographical distribution, new records, USA, Texas 2362.
Phryganidia, enzymatic activity, digestive tract, diets 1757.
Phryganidia, parasites, hosts, *Pinus banksiana*, new records, USA, Maine 2057.
Phrynosoma platyrhinos, food selection, predator-prey interactions, *Pogonomymex californicus*, *Pogonomymex rugosus*, USA, Nevada 2145.
Phrynosoma, taxonomic revision, species, synonymy, America 2388.
Phthia picta, sexual behavior, oviposition, Brazil, Sao Paulo 5105.
Phthiraptera, feeding, blood sucking, olfaction sensilla 2532.
 parasites, check lists, Mammalia, New Zealand 1231.
 parasites, surveys, *Haematopodidae* 516.
Phthirus pubis, infestation, man, epidemiology, treatment 2916.
Phthorimaea operculella, genetics, disease resistance, granulosis virus 6239.
 hosts, parasites abundance, seasonal variations, South Africa 2122.
 incidence, parasites, Australia, Queensland 2828.
 integrated control, insecticides, parasites, *Copidosoma koehleri* 7411.
 larvae, food organisms growth, fecundity, *Solanum tuberosum* 539.
 oviposition, eggs traps, methodology 857.
 pest resistance, screening, *Solanum tuberosum* 3824.
 sex pheromone, attractancy, pest control 6140.
Phthorinidae, new species, taxonomy, morphology, Brazil 3971.
Phycionia frustrana, hosts, parasitoids, association, competition 9140.
Phyciodes, taxonomy revision 1661.
Phycita infusella, population growth 9194.
Phycodella, synonymy, *Acampetocladius* 4828.
Phylan gibbus, cuticle, hydrocarbons 1730.
Phyllotaxia atriplex, new species, taxonomy, morphology 6360.
Phyllotaxia atriplex</

- Phylloxera violae**,
new records, geographical distribution, host plants, Egypt 7103.
- Phyllocoptruta demolea**,
pest control, pesticide applications, aerial applications, USA, Florida 3747.
- Phyllocoptruta oleivora**,
mathematical models, damage estimation, pest control, crop protection 1400.
pest control, biological control, pathogens, *Hirsutiella thompsoni*, USA, Florida 4548.
- Phylloidy**,
Myriophylla, disease transmission, plant diseases, *Neolaiturus fenestratus* 8467.
- Phylloxera violae**,
hosts, toxicity, insecticides 2655.
toxicity, insecticides, demeton, endosulfan, methomyl, oxamyl, azinphosmethyl, carbaryl 8200.
- Phylloxera crataegella**,
pests, annual variations, orchards, USA, Connecticut 5943.
seasonal variations, abundance, leaves damage, orchards, USA, Connecticut 3024.
- Phylloxera messanella**,
life cycle, host plants, mortality, Australia 3544.
- Phylloxera sorbicola**,
population genetics, sex ratios, Japan 2347.
- Phyllophaga**,
pests, infestation, effects on yield, *Pinus resinosa* 7765.
- Phyllophaga epilida**,
pest control, host plants pest resistance, *Ipomoea batatas* 6936.
- Phyllophaga verruculosa**,
new species, taxonomy, morphology, Italy 6455.
- Phyllotreta**,
pest control, economics, *Brassica campestris* crop fields, Canada 8534.
- Phyllotreta albionica**,
pests, abundance, habitat, Canada, Saskatchewan 8482.
- Phyllotreta armoracae**,
occurrence, geographical distribution, Canada, Saskatchewan 5531.
- Phyllotreta bipustulata**,
occurrence, geographical distribution, Canada, Saskatchewan 5531.
- Phyllotreta conjuncta**,
occurrence, geographical distribution, Canada, Saskatchewan 5531.
- Phyllotreta cruciferae**,
emergence, overwintering, parasites effects on, *Microctonus vittatae* 8316.
food organisms, predation, *Nabis alternatus* 8368.
interspecific relationships, competition, food sources, *Phyllotreta striolata*,
Pteris rapae 6829.
overwintering, site selection, habitat, population density 1974.
pests, abundance, habitat, Canada, Saskatchewan 8482.
- Phyllotreta striolata**,
emergence, overwintering, parasites effects on, *Microctonus vittatae* 8316.
interspecific relationships, competition, food sources, *Phyllotreta cruciferae*,
Pteris rapae 6829.
overwintering, site selection, habitat, population density 1974.
range, geographical distribution, habitat preferences, Canada, Saskatchewan 4335.
- Phylogeny**,
allopatry, *Drosophila takahashii*, *Drosophila pseudotakahashii* 5503.
geographical distribution, photoperiods effects on, *Lepidoptera* 2136.
brain morphology, *Symphyta* 7066.
breeding success, population genetics, *Drosophila* 6296.
chemical composition, defense secretions, *Dufour's* gland, *Andrenidae*, *North* 245.
classification, cladistic analysis, families, *Julida* 9441.
classification systems, evolution, *Poecodes* 8669.
compound eyes ultrastructure, *Cochenea*, *Cephenodes*, *Macroglossum* 7294.
courtship, recognition, conspecifics, *Drosophila nasuta* 7490.
defense secretions chemical composition, *Nasutitermus* 1566.
developmental stages, embryogenesis, *Neonitocrater nupponensis* 330.
distribution, morphology taxonomy, *Agria* 4793.
eggs morphology, *Pteronarcys* 8036.
electrophoresis, enzymes, *Pteridae*, *Europe* 3506.
enzymes, electrophoresis, *Bombus*, *Pisithyus* 4700.
Euxoa detorsa, *North America* 8839.
evolution, *Cuculionidae*, *Eurasia* 6292.
evolution, karyotypes, *Decius albifrons*, *Mediotera brachyptera*, *Atlanticus* 1567.
evolution, taxonomy, *Colymbetes* 5504.
food plants, *Rhopalidae* 8671.
fossils, wings, Cretaceous period, *Phasmida*, *Greenland* 4752.
functional morphology, anatomy, elytra, *Staphylinidae* 7288.
geographical distribution, morphology, *Oxythyra*, *Mediterranean Region* 1704.
karyotypes, *Orthocladinae* 2407.
karyotypes, polyploid chromosomes, salivary gland, *Anopheles* 9408.
karyotypes, taxonomy, *Orthocladinae* 2408.
mandibular glands secretions, α -aminoacetophenone, *Mycocrepus goeldii* 2608.
morphology, genitalia, *Aphaniptera*, *Oxyacreninae* 5039.
morphology, genitalia, males, syntypes, *Dereivellus mocquerysi* 8043.
morphology, larvae, *Nicrophorus*, *Phomaspis morio* 5637.
morphology, larvae, *Phalaenophana extremalis*, *Phalaenophana pyramusalis* 7264.
morphology, taxonomy, *Stethobolus* 3185.
Myllaena, *Neartarctic Region* 4742.
neurosecretion, distribution, *Brain*, *Pterygota* 123.
new species, *Himalaiterodes insignis*, *Nepal* 17.
new species, *Tamborina commoni*, *Australia* 2412.
niche pattern, oviposition site selection, *Drosophila melanogaster* 3350.
oviparity, fossils, *Aphidina*, *Tertiary* 792.
paleontology, reviews, *Insecta* 3135.
Paraleucopsis mexicana, *Mexico*, *Sonora*, *Kino Bay* 2884.
Phymatocera dahlbom 2507.
reclassification, *Microgasterinae* 6437.
reproductive organs morphology, males, *Formicidae* 3456.
sensilla morphology, males, *Chironomidae* 4966.
speciation, biogeography, *Idusia nyctelius* 7881.
Sphecoidea, *Apidae* 7882.
systematics, *Eucolidae* 8712.
taxonomic revision, *Diptera* 6398.
taxonomic revision, *Prosmididae*, *Africa* 7168.
taxonomy, *Ambositinae*, *Australia* 8819.
taxonomy, biogeography, *Clamidae*, *North America* 1576.
taxonomy, biogeography, *Philotarsidae* 4909.
- Phylogeny, (continued)**
taxonomy, classification systems, *Vespaidea* 4873.
taxonomy, genera characteristics, *Aranea* 776.
taxonomy, genetics, *Elaphrus americanus* 3189.
taxonomy, geographical distribution, *Amphizoa kashmirensis* 4789.
taxonomy, homoplasy, *Insecta* 5505.
taxonomy, morphology, *Chrysomelinae*, *British Isles* 5636.
taxonomy, morphology, geographical distribution, *Ancandella* 6453.
taxonomy, morphology, *Iuridae* 5554.
taxonomy, morphology, larvae, *Poliposus herculeanus* 5556.
taxonomy, morphology, *Megacanthopus* 7202.
taxonomy, *Saturia*, *Agapema* 7864.
taxonomy, *Sophodonts* 3610.
taxonomy, systematics, *Trachypachidae*, *Hydrachephaga* 4785.
wings venation, comparative studies, *Coleoptera* 73.
- Phymata wolfi**,
infestation, host plants, *Daucus carota*, *Canada*, *Ontario* 6796.
- Phymatocera dahlbom**,
sex differentiation, morphology, phylogeny 2507.
- Phymatocera offensa**,
synonymy, *Phymatocera rusculla* 2507.
- Phymatocera rusculla**,
synonymy, *Phymatocera offensa* 2507.
- Physoedemia globosa**,
hydrocarbons, biochemical characteristics, taxonomy 6565.
- Physalis**,
host plants, steroids, antifedants, *Epilachna varivestis* 2077.
- Physalis floridana**,
host plants, potato leaf roll virus disease transmission, *Myzus persicae*,
Macrosiphum euphorbiae 3395.
- Physalis minima**,
host plants, new records, *Oligonychus coffeae* 9151.
- Physical activity**,
diurnal variations, resting behavior, environmental effects, *Diptera* 4316.
life span, effects of temperature, sex ratio, *Musca domestica* 429.
pests, γ radiation, effects on membranes, *Dermestes vulpinus* 5133.
pigments, age, physiology, *Musca domestica* 321.
seasonal variations, *Brachytripes megarhynchus*, *Sicily* 4324.
seasonal variations, population structure, *Proteronotus fuscus*, *Finland* 5242.
vibratory stimuli, behavior response, *Argiope aurantia* 4320.
- Physical characteristics**,
flowers, effects on feeding behavior, pollination, *Xiphidium caeruleum*,
Paratetrapedia calcarata, *Euglossa imperialis* 558.
hemocytes, taxonomy, ecophysiology, *Noctuidae* 6543.
release factors, copulation, *Plodia interpunctella*, *Cadra cautela*, *Anagasta kuehniella* 408.
- Physical properties**,
cocoon, breeding, selection, *Bombus morio* 9427.
cocoon, selection, breeding, *Bombus morio* 9432.
cuticle, hormones effects on, molting, *Sciostocera gregaria* 2517.
cuticle, *Locusta migratoria* 7283.
food organisms, effects on feeding behavior, *Lymantria monacha* 491.
host plants, effects on mortality, *Gossypium hirsutum*, *Anthonomus grandis* 6115.
magnetization, *Danaus plexippus* 7280.
mounds, comparative studies, *Macrotermes subhyalinus*, *Macrotermes michaelseni* 41.
silk, *Araneae* 5718.
- Physiochemical properties**,
benzyl chrysanthemates, toxicity, neurophysiology, *Periplaneta americana* 5796.
fresh water, dunes, coastal zone, geographical distribution, *Odonata*, *Australia*,
Queensland 4457.
hemagglutinins, *Trypoxylus commodus* 157.
humor, contamination, *Macrogastrinae* 8503.
immunochromatography, antigens, allergens, *Dermatophagoides farinae* 1368.
kinetochore, chromosomes, meiosis, irradiation, *Lepidoptera* 1516.
prothoracic gland cells, ionic exchange, developmental stages, *Galleria mellonella* 6591.
- Physiology**,
activity patterns, circadian rhythms, *Periplaneta americana* 4985.
adaptations, cold tolerance, *Insecta*, *Antarctica* 2730.
aquatic organisms, adults, juveniles, *Insecta* 1486.
association, parasites, *Aphis craccivora*, *Vigna sesquipedalis* 524.
biology, control programs, conferences, *Atherigona soccata* 4496.
cardiovascular system, motor activity, visual stimuli effects on, *Calliphora vomitoria* 4146.
central nervous system, *Periplaneta americana* 4963.
chemoreceptors, *Entomoscopus americana* 4132.
chemoreceptors, taste perception, larvae, *Drosophila* 4141.
cold tolerance adaptations, alpine environments, *Insecta*, *Canada* 8103.
cold tolerance, polar environments, *Acari*, *Colembola* 979.
Corpora allata, developmental stages, *Achoea junata* 4176.
digestive, conferences, *Insecta* 3959.
diapause, tract, nutrition, *Periplaneta americana* 4992.
effects on molting, metamorphosis, *Insecta* 3517.
electric currents effects on, power lines, colonies, *Apis mellifera* 1866.
electrical properties, piezoelectricity, pyroelectricity, integument, *Blaberus giganteus* 886.
endocrinology, neurophysiology, *Insecta* 3955.
energetics, flight activity, age effects, *Apis mellifera* 4241.
exocrine glands, defense secretions, *Parasitopus armatipes* 1796.
eye, comparative studies, *Apis mellifera*, *Bombus hortorum* 904.
feeding, host-parasite interactions, reviews, *Nilaparvata lugens* 5675.
flight muscles, cytoplasm, metabolism, invaginations, tracheolization, *Locusta migratoria* 343.
follicles, B-ecdysone, effects on, *Carausius morosus* 4263.
genetic factors, symbiosis, *Staphylinus* 5174.
hemoglobin, oxygen exchange, buoyancy, aquatic animals, *Anisops assimilis* 1743.
hibernation, seasonal variations, *Culex salinarius* 660.
hosts, effects on parasitoids development, *Blastocera longicaudatus*, *Anastrepha suspensa* 9135.
hosts, parasites effects on, *Mermithidae*, *Insecta* 3404.
metabolism, resistance, fumigants, methyl bromide, *Staphylinus granarius* 1061.
metabolism, symbiosis, *Eucelidius incisi* 6748.
morphology, neuroendocrine system, *Periplaneta americana* 5004.
muscles, ion exchange, calcium, *Locusta* 4122.
neurons, thorax ganglia, *Locusta migratoria* 8065.

Physiology, (continued)

- neurotoxins, pyrethroids, effects on, *Periplaneta americana* 1040
 nutrition, diets effects on, food plants, *Spodoptera eridania* 5677
 nutrition ecology, behavior, environmental changes, *Insecta* 4464
 osmoregulation, excretion, water balance, *Periplaneta americana* 5011
 pesticide resistance, malathion, *Anopheles culicifacies* 1047
 phase variations, larvae, *Spodoptera exempta* 577
 phosphine resistance, chemical control, *Tribolium castaneum* 1046
 photoreceptors, light adaptations, *Apis mellifera* 6534
 pigments, age, physical activity, *Musca domestica* 321
 pituitariae, hemolymph, *Heliothis zea* 5684
 regeneration, *Periplaneta americana* 5073
 reproduction, seasonal variations, diapause, *Epilachna varivestis* 349
 reproduction, winter, *Anthonomus grandis grandis* 3558
 reproductive organs, *Parastizopus armaticeps* 9033
 reproductive system, *Periplaneta americana* 5099
 selection, pyrethroids, pesticide resistance, strains, *Musca domestica* 1055
 sense organs, sensilla, *Periplaneta americana* 4978
 skeletal muscle, inactivation, calcium, *Carausius morosus* 4124
 ultrastructure, fat body, molting, *Hypogastrura hulbergi* 4281
 wound healing, *Geolycosa pikei* 1092
- Physocephalus sexalatus**,
 parasites, *Onthophagus gazella*, USA, Georgia, USA, Texas 9203.
- Phytostacterius lanuginosus**,
 new genera, new species, taxonomy, morphology, South America 7949.
- Phytocoris discoidalis**,
 synonymy, *Phytocoris dreisbachi* 5581.
- Phytocoris dreisbachi**,
 synonymy, *Phytocoris discoidalis* 5581.
- Phytomyza davidi**,
 disease transmission, vectors, *Pachybrachius bilobata scutellatus* 8363.
- Phytomyza atricruris**,
 pest control, chemical control, crop fields, *Pisum sativum* 6897
 pest control, chemical control, insecticides 7711
- Phytomyza hasegawai**,
 new species, morphology, Japan 2419
- Phytomyza orobanchiae**,
 life cycle, abundance, infestation, *Orobanchia crenata*, Egypt 6812
- Phytomyza ranunculi**,
 population dynamics, temperature, host-parasite interactions, *Chrysoschans penitens*, *Diglyphus pusztensis* 7577
- Phytophthora**,
 infection, transmission, *Acyrtosiphon pisum*, *Trifolium hybridum* 8524
- Phytophthora cinnamomi**,
 pests, abundance, *Persea fruts*, *Insecta* 1454
- Phytophthora palmivora**,
 dispersal, role, *Phenolice megacephala*, *Planococcoides njalensis* 3327
- Phytophthora transients**,
 infestation, galls, *Zizyphus jujuba*, India 6798
- Phytoseiulus macropilis**,
 biological control, predation, *Tetranychus urticae* 2205
 predator-prey interactions, fecundity, development, oviposition, *Tetranychus urticae* 362
 predatory behavior, prey kairomones effects on, *Tetranychus urticae* 2156
- Phytoseiulus persimilis**,
 biological control, predation, *Tetranychus urticae* 2205
 feeding behavior, nutrient requirements effects on, food sources population density, age effects 1206
 feeding behavior, predation, food sources population density effects on, larvae 1205
 oviposition, development, feeding behavior 1870
 pest control, predators effects on, *Chermes clematicolus* 1265
 population dynamics, predator-prey interactions, *Tetranychus urticae* 2882
 predator-prey interactions, biological control, *Tetranychus urticae* 8709
 predator-prey interactions, population density, predators, effects on food consumption, predatory behavior 4466
 predator-prey interactions, population density, predators, effects on survival, fecundity, dispersal 4468
 predators, acapale, acute toxicity 309
 predators, biological control, *Tetranychus urticae*, British Isles 3023
 predators, pest control, pesticides effects on, *Tetranychus urticae* 3766
 predators, population density, spatial distribution, *Tetranychus urticae* 3625
 predatory behavior, population density, spatial distribution, prey 4350
 predatory behavior, predator-prey interactions, spatial distribution, prey 4356
- Phytotoxicity**,
 host plants, Umbelliferae, *Papilio polyxenes* 5968.
- Piagetella peralis**,
 parasites, infestation, juveniles, *Pelicanus erythrorhynchus* 9148.
- Piathypena scabra**,
 pests, defoliation, crop yield, *Glycine* max 3781.
- Picea**,
 host plants, ethanol, pest attack, *Dendroctonus rufipennis* 2843.
 stands, leaf litter, hibernation, *Ips typographus* 9044
- Picea abies**,
 cones, association, species composition, *Insecta*, Poland 9201.
 food availability, limiting factors, population density, *Gilpinia hercyniae* 2844
- Picea excelsa**,
 host plants, resistance, galls, *Chermes abietis* 7562.
- Picea glauca**,
 forests, infestation, mortality, *Choristoneura fumiferana*, Canada, Quebec 3036.
 host plants, susceptibility, pests, *Pionema alaskensis* 7785
- Picea sitchensis**,
 plantations, activity patterns, reproduction, mortality, *Pissodes strobi* 2161.
- Pichia cactophila**,
 food preferences, foraging behavior, *Drosophila mojavensis* 4342
- Picicola striata**,
 new species, taxonomy, morphology, Brazil 4899.
- Picornavirus**,
 mutagenesis, gene expression, X chromosome, *Drosophila melanogaster* 5471
- Pidephidae**,
 hosts, disease reservoirs, *Rhodnius pallescens*, Mammalia 667.
- Pleclipsis cardamomi**,
 new records, geographical distribution, Japan, Taiwan 2359.
- Pleridae**,
 feeding behavior, oviposition, host plants, introduced species, *Cruciferae* 2048.
 phylogeny, enzymes, electrophoresis, Europe 5506.
- Pleris aripa**,
 morphology, developmental stages, life cycle, Venezuela 2777.
- Pleris brassicae**,
 bibliographies, books 8710
 bioaccumulation, insecticides, diflufenzuron, localization, tissues, histochemistry, *Pieris brassicae* 1059
 catalase activity, localization, integument 8900.
 circadian rhythms, photoperiods 917
 cuticle infection, *Apanteles glomeratus* parasitism effects on *Beauveria bassiana* pathogenicity 8132
 feeding, food conversion, leaves, host plants 6746.
 larvae mortality, pathology, granulosis virus 270.
 neurosecretion, 6-L-erythroboposia effects on 4126
 pathogens, biological control, granulosis virus, biochemical characteristics 1468
 pest control, antifeedants, cypermethrin, permethrin 3032.
 pheromones, oviposition deterrents, persistence 217.
 pupae, morphology 5635.
- Pleris napi**,
 aggregation, mud, Finland 9092.
 migrations, swarms, Poland Coast 5212.
 population studies, diapause, British Isles 5074.
- Pleris oleracea**,
 sympatric populations, competition, extinction, land use effects on, *Pieris napi*, USA 1286.
- Pleris protodice**,
 courtship, mate selection, discrimination, age, body size 4297.
 visual discrimination, sex, sexual dimorphism 7496.
- Pleris rapae**,
 biological control, granulosis virus, temperature 2942.
 chemical control, insecticides, efficacy 3799.
 development, host plants effects on, nutrient availability, *Brassica nigra* 5960.
 egg production, life cycle, temperature effects on 7445.
 8-endotoxin toxicity, *Bacillus thuringiensis* 7381.
 gut histopathology, pathogens effects on 7382.
 infestation, vegetables, sampling 2196.
 interspecific relationships, competition, food sources, *Phyllotreta striolata*, *Phyllotreta cruciferae* 6829
 larvae mortality, pathology, granulosis virus 270.
 larvae survival, host plants chemical composition effects on 7567.
 mechanoreceptors, neurons, ultrastructure 903.
 migrations, swarms, Poland Coast 5212.
 pathogens, biological control, granulosis virus, biochemical characteristics 1468.
 pest control, insecticides, *Bacillus thuringiensis*, cultivars, *Brassica oleracea* 1834.
 pests, feeding, damage, crops, *Brassica oleracea* 8502.
 sodium requirements, sex differences, mud feeding, USA, Pennsylvania 4346.
 survival, parasitoids, granulosis virus, *Apanteles glomeratus* 4190.
 sympatric populations, competition, extinction, land use effects on, *Pieris oleracea*, USA 1286.
- Pleris rapae crucivara**,
 hosts, discrimination, oviposition experience, *Apanteles glomeratus* 7497.
- Pleris rapae crucivora**,
 adults, duration, life span, dispersal 4325.
 parasitoids, venom, eggs encapsulation, hosts, *Apanteles glomeratus* 8325.
- Pleris sisymbrii**,
 feeding, host plants, flowers, *Streptanthus*, USA, California 8340.
- Pteretia bimami**,
 new species, morphology, China, People's Rep. 3197.
- Ptesinidae**,
 evolution, cladistic analysis, host plants, geographical distribution, Gondwanaland 2352.
- Piezodorus guildinii**,
 dispersal, nymphs, legumes, *Nezara viridula*, Brazil 559.
- Pigmentation**,
 appendages, malformations, *Ephemeroptera*, *Plecoptera*, Sweden, Medelpad, Laxan R. 4656
 cuticle, control, corpora allata, *Chrysocoris stollii* 8898.
 environmental factors, larvae, *Ephestia kuehniella* 7350.
 eye color mutants, *Drosophila melanogaster* 1135.
 eye, mutants, phototaxis, *Drosophila melanogaster* 3096.
 eye, mutation, inheritance, *Oryzaephilus mercator* 5470.
 mutants, photoreceptors, phototaxis, *Drosophila* 2539.
 polymorphism, larvae, *Choristoneura fumiferana* 5643.
 polymorphism, photoperiod effects on, energetics, *Megoura* 2699.
- Pigments**,
 age, physiology, physical activity, *Musca domestica* 321.
 bile, chemical properties, role, photosensitivity, *Lepidoptera* 2601
 biochemical analysis, *Austrorachadica acaciae* 4170
 biosynthesis, genetic control, enzymatic activity, *Drosophila melanogaster* 3907.
 chemical composition, *Manduca sexta* 1790.
 compound eyes, *Anomala rufocuprea* 7301.
 cuticle, photoconduction, xanthines, colchicine, *Vespa orientalis* 4948.
 drosopeterin, eye, biosynthesis, biochemical analysis, *Drosophila melanogaster* 3325
 eye, isolation methodology, *Insecta* 2482.
 fluorescence, aging, lysosomes, *Spodoptera eridania* 4240.
 marking, *Culicoides varipennis* 853
 metabolism, β , ϵ -caroten-2-ol, β , ϵ -caroten-2-one, *Ectatosoma uaratum* 172.
 migrations, coloration, role, ATP pyrophosphatase, *Carausius morosus* 3363
 migrations, compound eyes, light effects, *Myndus crudus* 5297.
 photoperiods, diapause induction, predators, diets, *Acart* 4257.
 prothoracic pigment, hemolymph, body fluids, *Argas arboreus* 6540.
 rhodopsin, photoreceptors, proteins, opsin, vitamin A, mutation, *Drosophila melanogaster* 1740
 visual discrimination, color, achromatic vision, *Apis mellifera carnica* 4973.
- Pigs**,
 disease control, *Anopluia* 642
- Pilonema alaskensis**,
 diapause, emergence, temperature effects, cold 3495.
 pests, susceptibility, host plants, *Picea glauca* 7785
- Pilobattella berlessei**,
 abundance, soil properties effects on, plantations 5249

- Pilophorus confusus**,
new records, geographical distribution, Canada 4741.
- Pimpla instigator**,
females, sexual reproduction, mutagens effects on 3094,
mass rearing, oviposition, artificial substrates 2735.
- Pimpla turlionellae**,
nontarget organisms, toxicity, *Bacillus thuringiensis* kurstaki 7379.
- Pimplinae**,
morphology, instars 8034,
sex determination, antennae ablation, body size, hosts, egg laying 7471.
- Pinus boernerii**,
geographical distribution, damage, host plants, *Pinus resinosa*, USA, New England 8697.
- Pinus coloradensis**,
geographical distribution, damage, host plants, *Pinus resinosa*, USA, New England 8697.
- Pinus**,
host plants, effects on development, reproduction, *Dendroctonus ponderosae* 5975,
pest control, insecticides, *Dendroctonus frontalis* 8484.
- Pinus banksiana**,
hosts, parasites, *Hyssopus thymus*, *Phrynosfrontina*, new records, USA, Maine 2057.
- Pinus clausa**,
infestation, damage, *Systena marginalis*, USA, Florida 5168.
- Pinus contorta**,
host plants, orientation, gustatory stimuli, *Dendroctonus ponderosae* 4303,
pest control, methodology, explosives, *Dendroctonus ponderosae* 5303.
- Pinus contorta latifolia**,
host plants, pest resistance, fungi, *Dendroctonus ponderosae* 6186.
- Pinus echinata**,
association, traps, efficacy, *Insecta* 8021,
forests, community structure, infestation, population dynamics, *Dendroctonus frontalis* 3600,
spatial distribution, pupae, *Thanosimus dubius* 2082.
- Pinus jeffreyi**,
infestation, pests, sampling methodology, *Coleotechnites* 8559.
- Pinus kesya**,
defoliation, effects on survival, *Insecta* 3596.
- Pinus oocarpa**,
defoliation, effects on survival, *Insecta* 3596.
- Pinus pallasiiana**,
pest control, forests, food plants, *Insecta* 7690.
- Pinus ponderosa**,
damage, geographical variations, pests, infestation, *Rhyacionia bushnelli*, USA, Nebraska 4405,
extractants, effects on feeding behavior, *Ips paraconfusus* 2007,
host plants, effects on *Phloeosinus* biosynthesis, *Ips paraconfusus* 1786,
pest control, carbaryl, chlorpyrifos, *Dendroctonus brevicornis* 8525,
stands, defoliation effects on, *Orygia pseudotsugata*, USA, Idaho 3601.
- Pinus radiata**,
host plants, pests landing behavior, *Ips plastographus maritimus*, USA, California 3739,
softwoods, decay fungi effects on, food preferences, *Coptotermes acinaciformis* 1196.
- Pinus resinosa**,
host plants, damage, *Pinus boernerii*, *Pinus coloradensis*, USA, New England 8697,
plantations, yield, pests infestation effects on, *Phyllophaga* 7765.
- Pinus strobus**,
growth, diseases resistance, *Pinus strobus*, *Cuculionidae* 1393,
chemical control, chemical control, *Insecta*, USA, North Carolina 2982,
pests, life history, population dynamics, *Pissodes strobi*, USA, Maine 6187.
- Pinus sylvestris**,
damage susceptibility, lindane effects on, *Hyllobius* 9315,
host plants, feeding behavior deterrents, *Nedonipion serifer* 5952,
pest control, forests, food plants, *Insecta* 7690.
- Pinus taeda**,
association, traps, efficacy, *Insecta* 8021,
feeding, environmental impact, seeds, cones, injuries, *Leptoglossus corollae* 1238,
forests, community structure, infestation, population dynamics, *Dendroctonus frontalis* 3600,
host plants, extracts, effects on feeding behavior, *Dendroctonus frontalis* 1941,
predator-prey interactions, abundance, seasonal variations, *Cinara*, *Essigella pini*, USA, South Carolina 594,
spatial distribution, pupae, *Thanosimus dubius* 2082.
- Pinus virginiana**,
association, traps, efficacy, *Insecta* 8021.
- Pinus wallichiana**,
essential oil, response, *Coptotermes heimi* 2850,
parasite resistance, effects on parasites feeding behavior, *Bifiditermes beesoni* 481.
- Piona conglobata**,
feeding behavior, ecological distribution, Netherlands, Maarssen I L 5433.
- Piper amalago**,
seeds, predation, forests, *Phlebotomus*, Costa Rica 7604.
- Piper nigrum**,
pests, *Longitarsus nigripennis*, *Cydia hemidiosa*, *Lochops karnyi*, India, Kerala 6946.
- Piperonyl butoxide**,
effects on enzymatic activity, pesticide resistance, *Lobosia* 1841,
synergists, insecticides, eldrid, methomyl, mortality, *Spodoptera littoralis* 9023.
- Piptoporus australiensis**,
decay fungi, effects on softwoods, food preferences, *Coptotermes acinaciformis* 1196.
- Pipunculius campestris**,
keys, morphology, Czechoslovakia 2418.
- Pipunculius lichtwardti**,
new species, taxonomy, morphology, Czechoslovakia 2418.
- Pipunculius omisnervis**,
morphology, taxonomy, Czechoslovakia 2418.
- Pirata**,
new species, taxonomy, morphology, males 802.
- Pirithedii**,
neurorphysiology, nerve transmission, *Periplaneta americana* 3280.
- Pirimicarb**,
pesticide resistance, population genetics, enzymatic activity, *Aphis gossypii* 3922,
pesticides, toxicity evaluation, *Apis mellifera* 8171,
toxicity, *Myzus persicae*, *Coleomegilla maculata lengi*, *Chrysopa oculata* 318.
- Pirimiphos**,
insecticides, toxicity, *Sinophilus granarius* 5769.
- Pirimiphos methyl**,
stored products pest control, efficacy, *Insecta* 676,
toxicity, pest control, *Sinophilus granarius* 9297.
- Pirimiphos-methyl**,
insecticides, effects on nontarget organisms, population levels, *Carabidae*,
Staphylinidae, Czechoslovakia, *Jerske Hory Mts* 7571,
pesticide resistance, genetic variance, strains, *Tribolium castaneum* 7394.
- Pirimiphosmethyl**,
insecticides, toxicity, *Culex quinquefasciatus*, *Anopheles stephensi* 3442.
- Pisces**,
predation, effects on food organisms coloration, *Acan* 6228.
- Pison**,
nests, prey, behavior, Australia 1957.
- Pison areniferum**,
new species, taxonomy, morphology, Australia 2448.
- Pison barbatum**,
new species, taxonomy, morphology, Australia 2448.
- Pison ciliatum**,
new species, taxonomy, morphology, Australia 2448.
- Pison ignavum**,
nests, prey, behavior, Australia 1957.
- Pison marginatum**,
nests, prey, behavior, Australia 1957.
- Pison rufipes**,
nests, prey, behavior, Australia 1957.
- Pison spinolae**,
nests, prey, behavior, Australia 1957.
- Pison tibiale**,
nests, prey, behavior, Australia 1957.
- Pison westwoodi**,
nests, prey, behavior, Australia 1957.
- Pissodes strobi**,
activity, patterns, reproduction, mortality, plantations 2161,
antifeedants, leaves, oils, *Thupa plicata* 4352,
feeding bioassays, chemical stimuli, host plants, host preferences 5162,
life history, population dynamics, pests, *Pinus strobus*, USA, Maine 6187,
pest control, growth regulators effects on reproduction 3791.
- Pistacia**,
host plants, *Gelechioidea* 4896.
- Pistacia vera**,
crop fields, damage, pests, *Telphusa pistaciae*, Iran 5296,
orchards, pest outbreaks, damage, *Ameloea transistella* 6105.
- Pisum**,
crops, damage, pests, *Malenagromyza phaseoli*, India 9336.
- Pisum sativum**,
crop fields, pest control, chemical control, *Phytomyza atricornis* 6897,
seeds, infestation, pest resistance, measuring techniques, *Bruchus pisorum* 8530.
- Pitfall traps**,
efficiency, barriers, methodology 4085.
- Pithitis smaragdula**,
flight range, nests, pollination, population growth, *Medicago sativa* 7564.
- Pitohai kirkecephalus**,
hosts, parasites, new species, *Torotribicula kirkecephalus*, New Guinea 3968.
- Pits**,
burrowing behavior, soil temperature, light intensity, *Myrmecoleon immaculatus* 6223,
construction, light intensity, soil moisture, larvae, *Myrmecoleon immaculatus* 5126.
- Pityogenes calcaratus**,
hosts, parasites, new species, *Nosema calcarati* 9002.
- Pityogenes chalcographus**,
life cycle, reproduction, ecological distribution 6715.
- Pityogenes monacensis**,
geographical distribution, new records, Sweden 3943,
new records, geographical distribution, Sweden, *Gotska Sandöen I.* 4704.
- Pityophthorus antillensis**,
new species, Dominican Republic 806.
- Pityophthorus denticulatus**,
taxonomy 806.
- Pityophthorus pinsapo**,
new species, taxonomy, bionomics, Spain 8763.
- Plagiognathus albus**,
synonymy, *Plagiognathus inopinus* 5581.
- Plagiognathus arbustorum**,
population studies, sampling, crop fields, Sweden 3807.
- Plagiognathus inopinus**,
synonymy, *Plagiognathus albus* 5581.
- Plagiognathus ribesii**,
new species, taxonomy, morphology, Canada, British Columbia 4007.
- Plagiorhynchus cylindraceus**,
parasites, effects on hemolymph cells, *Armadillidium vulgare* 1012.
- Plagithymus bilineatus**,
life history, ecology, oviposition, host selection, hosts, stress, *Metrosideros collina* polymorphs 1961.
- Plague**,
disease transmission, blood meals, man, *Xenopsylla gergillii minax*, *Xenopsylla conformis* 9124.
- Planetes elegans**,
Laboulbenia sciakyi parasitism, new records 5990.
- Planthylaeus**,
new genera, taxonomy, morphology, Australia 4749.
- Planning**,
environment management, pest control, research programs, *Insecta* 3809.
- Planococcoides njalensis**,
role, *Phytophthora palmivora* dispersal 9327,
vectors, plant diseases, abundance, Ghana 1260.
- Planococcus citri**,
biological control, integrated control, pest control, Italy 3722,
interspecific relationships, parasitism, community composition, *Iridomyrmex humilis*, *Saussia oleae*, France 3612,
natural enemies, nontarget organisms, toxicity, pesticide residues 5800.

- Planococcus citri**, (continued)
parasites, *Pandora peregrina* 7504
pest control, chemical control, pesticides 2189
vectors, plant diseases, abundance, Ghana 1260.
- Planococcus ficus**,
morphology, taxonomy, keys 6514.
- Planococcus lilacinus**,
new records, Guyana 1580.
- Planotetrax excessana**,
abundance, pest control, crop fields, *Fragaria vesca* 3816.
- Plant breeding**,
varieties, pest resistance, *Oryza sativa*, *Orseolia oryzae* 522.
- Plant communities**,
association, abundance, Arachnida, USA, New Mexico 1953
association, species richness, species composition, Formicidae, Panama 8344
community structure, succession, forests, Arthropoda, USA, Arizona 6854
environmental impact, herbivores, *Gutierrezia sarothrae*, *Machaeranthera*
canescens, USA, New Mexico 2063
guilds, myrmecophily, USA, West Virginia 2837
mutualism, food sources, tropical environment, formicidae 4399
recolonization, community composition, reclaimed land, mites, Arthropoda 6048
seed dispersal, forests, Formicidae 3602
wildlife management, wildlife conservation, Lepidoptera, Canada, Newfoundland
2107.
- Plant diseases**,
cassava mosaic virus, vectors, *Bemisia tabaci* 7653
disease transmission, barley yellow dwarf virus, *Rhopalosiphum padi* 8468
disease transmission, *Cicadulina bipunctata* zea, Egypt, Arab Rep. 8471
disease transmission, maize stripe virus, *Peregrinus maidis*, Zea mays 8455
disease transmission, *Microplasma phylloidy*, *Neolaiticus fenestratus* 8467
disease transmission, pea enation mosaic virus, *Acyrtosiphon pisum* 8488
mosaic disease, vectors, *Aphis gossypii* 7652
transmission, bean yellow mosaic virus, *Phytophthora*, *Trifolium hybridum*,
Acyrtosiphon pisum 8524.
vector-borne diseases, viruses, epidemiology, *Oryza sativa*, *Insecta* 9275.
vectors, abundance, Coccidae, *Pseudococcidae*, Ghana 1260.
vectors, tomato spotted wilt virus, *Scirtothrips dorsalis*, *Frankliniella*
schulzei 6909.
vectors, *Vectidicladella alacris*, *Orthotomicus erosus* 7648.
viruses, disease transmission, *Myzus persicae*, *Lycopersicon esculentum* 7654.
- Plant extracts**,
antifeedants, *Corchorus capsularis*, *Mytilus discolor* 2851.
antifeedants, feeding stimuli, phenolics, *Morus*, *Bombyx mori* 7529.
antifeedants, neem oil, *Azadirachta indica*, *Schizocera gregaria* 7347
antifeedants, *Thupa plicata*, *Psittodes strobil*, *Alfalfa* 4352.
Avena, olfactory stimuli, attractancy, aggregation, *Oryzaephilus surinamensis*
6700.
coumarin, eupoin, ovicides, growth inhibitors, *Eupatorium japonicum*, *Drosophila*
melanogaster 6621.
effects on parasitism, crop fields, biological control, *Heliothis zea*.
Trichogramma 5382.
feeding deterrents, *Trifolium repens*, *Heteronychus arator* 6912.
insecticides, toxicity, *Bagrada cruciferarum*, *Centratherum anthelminticum*,
Cyperus rotundus, *Strychnos nux-vomica* 6625.
neem oil, toxicity, larvae, *Azadirachta indica*, *Culex fatigans* 7396.
oviposition deterrents, *Lemna minor*, *Aedes aegypti* 5311.
toxicology, metamorphosis, larvae, *Epilachna varivestus*, *Azadirachta indica* 3435.
- Plant hosts**,
comparison, biology, reproduction, *Phyllocnistis citrella* 551.
isolation, *Quercus*, mortality, survival, *Gracillanidae*, larvae 2135.
- Plant nutrition**,
community composition, Insecta, salt marshes, herbivores, *Spartina* 2290.
- Plant protection**,
antifeedants, *Diabrotica* 2976
Malus pumila, *Laspeyresia pomonella* damage, biological control, *granulosis virus*
8440.
Plant viruses,
disease transmission, Aphididae, Australia 3837.
- Plantations**,
abundance, seasonal variations, Fulgoroidea, USA, North Carolina 1313.
activity patterns, reproduction, mortality, *Psittodes strobil* 2161
Anacardium occidentale, pest control, rhabdovirus oryctes, *Plocaenus*
ferrugineus 8453.
colonization, Coniferales, *Glossina pallidipes*, *Trypanosoma*, Africa 1267
damage, arid zones, Isoptera, India 6210.
damage, pests, *Odontotermes gurdaspurensis*, *Odontotermes obsesus*, *Eucalyptus*,
India 7700.
occurrence, survival, *Magicicada*, Coniferales 6161.
Persea, pest control, natural enemies, *Pseudococcus longispinus* 2945.
pest control, parasites, *Lixophaga diatraeae*, *Diatraea saccharalis*, USA,
Louisiana 2957.
population dynamics, abundance, soil properties effects on, *Cryptostigmatae*
5249.
yield, pests infestation effects on, *Phyllorhapha*, *Pinus resinosa* 7765.
- Plants**,
antifeedants, chemical composition, *Leptinotarsa decemlineata* 521.
association analysis, Insecta, *Xanthocephalus sarthrae*, *Xanthocephalus*
microcephala 2064.
cils, collection structure, functional morphology, *Anthophoridae* 91.
cils, effects on roots, *Geocica utricularia* 726.
pests effects on, *Triticum aestivum*, Aphididae 548.
pests, infestation, effects on growth, *Forcipata loca*, *Festuca arundinacea* 2087.
pollinators, interspecific relationships, mathematical models 523
vegetation patterns, effects on, site location, oviposition, *Heteronychus arator*
403.
- Plaque assay**,
pathogens, nuclear polyhedrosis virus, *Galleria mellonella* 8144.
- Plasma**,
proteins, amino acid composition, fat body mRNA protein biosynthesis, *Bombyx mori*
3913.
- Plasma levels**,
juvenile hormones, queens, *Apis mellifera* 5001.
sugar, correlation analysis, honey production, *Apis mellifera* 5325.
- Plasma membranes**,
adenylate cyclase regulation, brain, *Ceratitis capitata* 8091.
- Plasma proteins**,
genes, DNA, nucleotide sequence, *Drosophila* 3876.
- Plasmodium**,
disease transmission, malaria, Anopheles, Pakistan 2911.
malaria vectors, population genetics, susceptibility, Anopheles 7629.
parasites, development, Culicidae 2625.
- Plasmodium berghel berghel**,
pathogens, genes, susceptibility, Anopheles atroparvus 9015.
- Plasmodium cynomolgi**,
parasites, infection, effects on longevity, Anopheles dirus 5749.
strains, infection, Anopheles quadrimaculatus, Anopheles freeborni 5027.
- Plasmodium falciparum**,
malaria, disease transmission, Anopheles, Europe 4487.
malaria transmission, chemical control, Anopheles darlingi, French Guyana 636.
parasites, life cycle, infection, Anopheles balabacensis 8151.
- Plasmodium gallinaceum**,
inactivation, zygotes, proteinase, *Aedes aegypti* 8126.
malaria, disease control, inhibition, fertilization, gametes, Culicidae 4483.
- Plasmodium harnandi**,
malaria transmission, Culicidae, USA, Florida 1320.
- Plasmodium vivax**,
malaria, disease transmission, Anopheles, Europe 4487.
- Plasmodium yoelii nigriensis**,
pest control, infection, genetics, Anopheles gambiae 5338.
- Platypeta scabra**,
abundance, crop fields, agricultural practices effects on 3035.
abundance, Glycine max crop fields 2164.
host-parasite interactions, *Apanteles marginiventris*, USA, South Carolina 507.
pests, abundance, hosts plants, Leguminosae, USA, Tennessee 1425.
- Platyacarus**,
new genera, taxonomy 8719.
- Platyacarus dactyloctenii**,
new species, taxonomy, morphology 8719.
- Platyacarus oligolacius**,
new species, taxonomy, morphology 8719.
- Platylabus odiosus**,
new records, geographical distribution, Sweden 4724.
- Platybuninae**,
taxonomy, morphology 15.
- Platybunus strigosus**,
rare species, taxonomy, morphology 15.
- Platycis minutus**,
new records, geographical distribution, habitat, British Isles, Berkshire 6313.
- Platycypha caligata**,
mating behavior, oviposition, territorial behavior 8614.
- Platycypha fitzsimoni**,
mating behavior, courtship, display 6667.
- Platygyaster**,
surveys, *Orseolia oryzae*, China, People's Rep. 1013.
- Platygystridae**,
check lists, species composition, taxonomic revision, species, Finland 7894.
- Platymantisinae**,
species composition, collections, Natural History Museum of Geneva, Europe,
Africa, South America, Malaysia 7883.
- Platynoeta stultana**,
pest, feeding site preferences, *Apium graveolens* 8550.
- Platynothrus skottsbergi expansus**,
life history, population dynamics 5883.
- Platyperigea**,
taxonomy, morphology, genitalia 6500.
- Platyptezidae**,
new records, geographical distribution, occurrence, community composition,
Czechoslovakia 2358.
- Platypheura capitata**,
sound production (biological), muscles, action potential 264.
- Platypodidae**,
introduced species, occurrence, wood, Israel 9464.
pests, species composition, ecological distribution, South America 7722.
- Platypyllia cardiodactyla**,
pest control, sex pheromone 2187
sex pheromone, chemical composition, attractancy 1788.
- Platypyllia pica**,
biology, developmental stages 1727.
- Platyscytus**,
identification keys, Panama, Porto Bello 4848.
- Platyscytus beniruber**,
new species, taxonomy, morphology, Panama, Porto Bello 4848.
- Platyscytus tucuruiensis**,
new species, taxonomy, morphology, Brazil, Pam 4854.
- Plautia stali**,
indole-3-acetic acid metabolism, gut 3311.
- Plea leachi**,
U.V. radiation effects on movements, orientation 6232.
- Plebeia droryana**,
foraging behavior, activity patterns, males 9362.
- Plebejus argus**,
new records, geographical distribution, Spain 7076.
- Plecoptera**,
appendages, malformations, pigmentation, Sweden, Medelpad, Laxaan R. 4656.
check lists, morphology, taxonomy, new species, Nepal 3231.
check lists, records, range extension, geographical distribution, USA, Alaska
7019.
drumming, auditory communication 8268.
food organisms, predation, Aves, USA, Michigan 6820.
new species, taxonomy, morphology, Australia 4907.
pollution effects, sedimentation, nutrient enrichment, species richness, species
diversity, streams, USA, Appalachian Mts. 7815.
species composition, abundance, sewage effluents, dams effects on, Canada,
Alberta, Bow R. 8608.
- Plectropterinae**,
excretory products, uric acid 928.
- Plectrocnemiella**,
systematics 4067.
- Plegaderus sanatus**,
new records, geographical distribution, Sweden, Gotska Sandöen I. 4704.

- Pleiotocene epoch**,
fossils, nests, Hodoteriidae, South Africa, Clanswilliam 5540.
- Pleiotophora dixiphi**,
infection, pathology, eggs, Dixippus morosus 9008.
- Pleiotophora schubergii**,
infection, pests, biological control, Choristoneura fumiferana 3812.
- Pleiotophora schubergii neustriacae**,
parasites, life cycle, Malcosoma neustria 8124.
- Pleocoma**,
flight activity, adults, biology, eggs, larvae, USA, Oregon 6729.
- Pleuraphis pannonicus**,
taxonomy, morphology 8764.
- Plexippus**,
retina, anterior median eye, anatomy, functional morphology, photoreceptors 4971.
- Plinthus pawlowski**,
new species, taxonomy, morphology, Turkey, Tatos Mts. 19.
- Platiphora syleptae**,
parasites, infection, Sylepta ruralis 998.
- Placaederus ferrugineus**,
pest control, Anacardium occidentale plantations, rhabdovirus oryctes 8453.
- Platycypha angusticeps**,
new species, taxonomy, morphology, Argentina 7241.
- Plodia interpunctella**,
atmospheric conditions, nitrogen, carbon dioxide, effects on feeding 8278.
biological control, pests, stored products, biological control, Bacillus thuringiensis 8474.
chitin biosynthesis, epidermis 2516.
copulation, release factors, physical characteristics 408.
diets, isomers fatty acids, effects on growth 378.
eye color mutants, morphology, genetic factors 3905.
fecundity, aging, oocytes degeneration 9062.
flight activity, sex pheromone, correction 1122.
β-D-glucopyranosyl-O-L-tyrosine, biochemistry, development, larvae 6519.
immature stages, temperature-sensitive 363.
juvenile hormones analogs effects on development 2258.
occurrence, stored products, Czechoslovakia 9294.
pesticide resistance, beritability, malathion, DDT, dieldrin 1560.
pests, stored products, chemical control, growth regulators, CGA-28772 9331.
pests, stored products, growth regulators, CGA-28772 6103.
pests, stored products, peanuts, pesticide resistance, insecticides, USA, Southeast 4223.
pests, stored products, pesticide resistance, Switzerland 6921.
proteinase, characterization, isoelectric focusing 5692.
sex pheromone, orientation, sexual behavior, females 5840.
stored products pests, pesticide resistance 8205.
temperature effects, mating behavior, fecundity, molting 1874.
- Ploughing**,
grasslands, ant hills size, historical ecology, Lasius flavus 569.
- Plum pox virus**,
disease transmission, Myzus persicae, Myzus varians 1259.
vectors, flight activity, orchards, Aphididae 3835.
- Plusia chalcites**,
sex pheromone, chemical composition 2598.
- Plusia chryson**,
new records, geographical distribution, Sweden 7083.
- Plusia gamma**,
cold tolerance, overwintering, larvae, pupae 6864.
development, diapause, environmental effects, temperature, photoperiod, seasonal variations 7470.
- Plusia mandarina**,
new records, geographical distribution, morphology, genitalia, males, Sweden, Uppland 4714.
rare species, new records, geographical distribution, Sweden 4723.
- Plusia pennsylvanica**,
larvae, pathogenicity, Pacilomyces farinosus 1001.
- Plusiocampa bonadonai bonadonai**,
geographical distribution, Switzerland, Valais 4822.
- Plusiocampa bonadonai lanzai**,
geographical distribution, Switzerland, Valais 4822.
- Plusiocampa bonadonai pavani**,
new species, taxonomy, morphology, Switzerland, Valais 4822.
- Putella maculipennis**,
larvae, parasitoids, species composition 9139.
- Putella xilostella**,
pests, economic importance, Venezuela 2777.
- Putella xyloetella**,
capture-recapture studies, sex pheromone pheromone traps, simulation models 218.
chemical control, insecticides, efficacy 3799.
females, sex pheromone, purification, chemical composition 8964.
pest control, Bacillus thuringiensis 1836.
pest control, insecticides, Bacillus thuringiensis, cultivars, Brassica oleracea 1834.
pesticide resistance, strains 4443.
pests, feeding, damage, crops, Brassica oleracea 8502.
pests, infestation, vegetables, sampling 2196.
sex pheromone, biochemical analysis 3346.
- Ptyosphincta boops**,
new records, geographical distribution, Sweden 4724.
- Pseudomyiodes caninum**,
case reports, infestation, Canis familaris, USA, Illinois 7641.
- Poa pratensis**,
cultivars, host plants susceptibility, Sphenophorus parvulus 5327.
cultivars, pests susceptibility, Sphenophorus parvulus 537.
yield, larvae feeding effects on, Cyclocephala immaculata 3773.
- Ponens yehi**,
new records, geographical distribution, USA, Kentucky 7918.
- Pocillocooccus longibius**,
new species, new genera, geographical distribution, taxonomy, morphology, Australia 827.
- Podagrica punctiollis**,
life cycle, pest control, Sudan 2852.
- Podagrica ajostoides**,
pest control, insecticides, crop fields, Hibiscus esculentus, Nigeria 5402.
- Podagrica uniflora**,
pest control, insecticides, crop fields, Hibiscus esculentus, Nigeria 5402.
- Podagrion mantis**,
mating behavior 1654.
- Podagrioninae**,
taxonomy, new species, new combinations, morphology, geographical distribution 1654.
- Podichneus agenor**,
competition, males, adaptations, morphology, competitive behavior 4423.
- Podius maculiventris**,
overwintering behavior, ecological distribution, USA, South Carolina 455.
predators, nuclear polyhedrosis virus transmission, pest control, Trichopilia ui 3811.
- Podopinae**,
classification, morphology, host plants 3251.
- Podosia syrinx**,
pheromone traps color, effects on efficacy 2248.
- Poecilimon bosphoricus**,
pests, occurrence, crop fields damage, Helianthus annuus, Turkey 4537.
- Poecilimilis nigricans zwartbergae**,
new subspecies, taxonomy, South Africa 8837.
- Poecilimilis palmus margaritae**,
new subspecies, taxonomy, South Africa 8837.
- Poecilochrysis formicophilus**,
morphology, geographical distribution, introduced species, USA 6333.
- Poecilictis cothurnatus**,
cold searching behavior, oviposition, Bupalus piniarius 2020.
parasitoids, host-parasite interactions, oviposition, host preferences, Bupalus piniarius, Netherlands 5179.
- Poekilocerus pictus**,
brain, ventral nerve cord, neurosecretion cells, spatial distribution, size, histology 5666.
neurosecretion, optic lobe, cytology, histology 4180.
pest control, insecticides, penfluron, diflubenzuron, inhibition, sexual reproduction 4619.
- Pogonomyia xianjiangensis**,
new species, morphology, China, People's Rep. 3197.
- Pogonomyia**,
new species, taxonomy, morphology, 2 species, USA, Texas 6432.
taxonomy, morphology, keys, geographical distribution 7217.
- Pogonomyia basalis**,
colonies, foraging behavior, intraspecific relationships, competition 2006.
- Pogonomyia bigibendensis**,
new species, taxonomy, morphology, USA, Texas 6432.
- Pogonomyia californicus**,
copulation, male selection 8257.
foraging behavior, predator-prey interactions, Phrynosoma platyrhinos, USA, Nevada 2145.
- Pogonomyia colei**,
new species, taxonomy, morphology 7217.
- Pogonomyia laevimodis**,
new species, taxonomy, morphology 7217.
- Pogonomyia occidentalis**,
colonies, survival, population dynamics, USA, Nebraska 6987.
- Pogonomyia owyhee**,
feeding behavior, division of labor, caste differentiation, social organization 2282.
foraging behavior, resource partitioning, colonies, USA, Idaho 5915.
γ-radiation, mortality, temperature effects 1167.
- Pogonomyia rufipes**,
feeding behavior, food preferences, seeds 2805.
foraging behavior, predator-prey interactions, Phrynosoma platyrhinos, USA, Nevada 2145.
- Poikilotherms**,
cold tolerance, thermoregulation, survival, Alaskozetes antarcticus 976.
- Poisoning**,
venom, man, Araneae, Scorpiones, Hypodermatidae 8183.
- Polana**,
new species, taxonomy, morphology, South America 7984.
- Polana bitubera**,
new species, taxonomy, morphology, Bolivia 5585.
new species, taxonomy, morphology, Bolivia 8809.
- Polana inana**,
new species, taxonomy, morphology, Bolivia 5585.
new species, taxonomy, morphology, Bolivia 8809.
- Polana orcula**,
new species, taxonomy, morphology, Bolivia 5585.
new species, taxonomy, morphology, Bolivia 8809.
- Polana portochuela**,
new species, taxonomy, morphology, Bolivia 8809.
- Polana pravada**,
new species, taxonomy, morphology, Bolivia 5585.
new species, taxonomy, morphology, Bolivia 8809.
- Polana protochuela**,
new species, taxonomy, morphology, Bolivia 5585.
- Polana tuberosa**,
new species, taxonomy, morphology, Bolivia 5585.
new species, taxonomy, morphology, Bolivia 8809.
- Poland**,
colonies, mortality, Chalcidomera murana 9363.
life cycle, occurrence, males, Megastigmus pictus 9110.
new records, geographical distribution, Chalcidoidea, Proctotrupoidea 9467.
new species, taxonomy, morphology, Chaetophorus diversitotus 8815.
new species, taxonomy, morphology, Cricotopus zavrel 4837.
new species, taxonomy, morphology, Dicytomma christinae 8780.
species composition, association, Picea abies cones, Insecta 9201.
surveys, new records, Aphididae 787.
- Poland Coast**,
surveys, Omiscoidea 788.
- Poland Coast**,
migrations, swarms, community composition, Pieris rapae, Pieris napi, Vanessa cardui, Sympyla 5212.
- Poland, Palawy**,
occurrence, species composition, Bombus 9476.
- Polar environments**,
adaptations, cold tolerance, survival, Insecta, Canada 980.
cold tolerance, physiology, Acari, Collembola 799.
- Polarity**,
cuticle, genetics, mutants, Drosophila melanogaster 6271.

- Polarization**,
light, orientation, *Apis mellifera* 7507.
light, orientation, navigation behavior, *Apis mellifera mellifera* 8263
light, role, navigation behavior, *Corvidae* 2857
neurons, Octopamine receptors, *Limulus*, *Periplaneta americana* 130
- Polemistis abnormis**,
new records, geographical distribution, Austria, Scheibbs Region 4729
- Polla adjuncta**,
enzyme activity, lipid metabolism 948.
- Polioptilum foliosidatum** H.,
hosts plants, oviposition deterrents, *Hylenia* 528
- Polistes**,
karyotypes, chromosomes 3078
rearing methodology, artificial substrates, nests 1852
venom, immune response, man 1325
- Polistes apachus**,
karyotypes, chromosomes 3078
- Polistes canadensis**,
sternal gland, anatomy, functional morphology, comparison, *Polistes fuscatus* 1801
- Polistes carolina**,
karyotypes, chromosomes 3078
- Polistes chinensis antennalis**,
colonial characteristics, nesting behavior, workers 2269.
colonies, population levels, emergence, effects on, predatory behavior 2788.
nest building, nesting behavior 2270.
- Polistes comanchus navajoe**,
proteins, venom, biochemical analysis 4231
- Polistes exilimanus**,
aggregation, overwintering 5228
colonial characteristics, nests, sex ratio 3045
karyotypes, chromosomes 3078
overwintering, aggregation behavior, clumping, gynes 9355.
- Polistes exilimanus**,
parasites, *Chalcidella iphitalis*, *Elasmus polistes*, predation, *Crematogaster laeviuscula*, life tables 2155
- Polistes foederatus**,
caste differentiation, environmental effects, temperature, development, larvae, Pupae 4315
Van der Vecht organ glands, secretions, life cycle 6592
- Polistes fuscatus**,
colonial characteristics, defense mechanisms, Formicidae repellents 6984
colonization, queens, foundresses, egg laying, dominance 1893
mate selection, conspecific recognition 6604
queens, foundresses, colonization, egg laying, dominance 1893
sternal gland, anatomy, functional morphology, comparison, *Polistes canadensis* 1801
- Polistes gallicus**,
homing behavior, orientation, wind, Italy 1262
orientation, homing behavior 5114
reproductive status, corpora allata, ovary development, hierarchy, foundress 5060
social hierarchy, pleometrotic foundations, haplometrotic foundations, sexual reproduction, breeding success 5423
- Polistes hebraeus**,
neurosecretion, optic lobe, cytology, histology 4180
- Polistes metricus**,
intraspecific relationships, association 1480.
karyotypes, chromosomes 3078
queens, colonization, reproduction 2129.
- Polistes nimpha**,
territorial behavior, aggressive behavior, scent marking behavior 5156.
- Pollen**,
apiculture, economics, market research 2968
artificial diets, honey production, brood rearing, apiculture, *Apis mellifera* 5306.
attractancy, foraging behavior, *Apis mellifera* 8302.
calories, *Apis mellifera* 8928.
collections traps, storage, collections, apiculture, *Apis mellifera* 1406
diets, brood rearing, apiculture, *Apis mellifera* 5310
diets, effects on population growth, fecundity, *Ambylyseius hibisci* 7572.
dispersal, effects on population genetics, *Diamorpha smalli*, *Formica* 553
food plants, *Meliponinae*, *surinam* 5196.
food preferences, colonies, *Apis mellifera*, Canada, Alberta 2010
food sources, *Osmia scutellum*, USA, Utah 9101
foraging behavior, diurnal variations, *Apis mellifera*, *Zea mays* 5923
foraging behavior, energetics, *Apis mellifera*, *Helianthus annuus* 6735.
honey toxicity, case reports, *Apis mellifera*, Nepal 5321.
nectar, seasonal variations, *Apis mellifera* 5320.
pesticide residues, host plants, nontarget organisms, *Megachile rotundata*, *Medicago sativa* 8395.
resource utilization, foraging behavior, niche breadth, *Bombus*, Sweden 4480
transport, digestive tract, *Leioproctus cyanescens*, *Euryglossidae* 8927
- Pollination**,
agricultural practices, *Apis mellifera*, *Medicago sativa*, USA, California 2941
agricultural practices, effects on yield, *Apis mellifera*, *Helianthus annuus* 3730
association, *Pyrgodes hamadryas*, *Acacia baileyana* 9158
attractancy, *Glycyne max*, *Apis mellifera* 5972
attractants, *Malus domestica*, *Apis mellifera* 5411
coevolution, host plants, species diversity, *Apis mellifera*, North America 1564
competition, *Insecta*, *Centaurea scabiosa*, *Centaurea nigra* 7552
dispersal, orchards, *Osmia lignaria propinqua* 5342.
dispersion, interspecific relationships, *Pedicularis*, *Bombus*, USA, Alaska, Alaska 4404.
effects on crop production, *Frankliniella insularis*, *Cajanus cajan*, Trinidad 737
effects on flowering phenology, yield, *Brassica napus oleifera*, *Apis mellifera* 4582.
effects on fruits yield, *Apis mellifera* 2186.
efficiency, *Allium cepa*, *Halictus fuscus* 9166
efficiency, *Apis mellifera*, *Peponapis pruinosa*, *Cucurbita pepo* 6797
efficiency, *Halictus* 5197.
environmental effects, shade, breeding sites, *Theobroma cacao*, *Forcipomyia* 4267
feeding behavior, *Apis mellifera* 542.
feeding behavior effects on yield, *Apis mellifera*, *Malus domestica* 1237
feeding behavior, *Xiphidium caeruleum*, *Paratetrapedia calcarata*, *Euglossa*
- Pollination, (continued)**
imperialis 558
flight range, *Medicago sativa*, *Pithitis smaragdula* 7564
flowering, *Carludovica palmata*, *Meliponinae* 9150
flowering, evolution, *Angiospermae*, *Insecta* 5200
flowering, *Fraxera carolinensis*, *Apis mellifera* 6791
flowering, *Insecta*, *Lomatium* 6785.
flowering, *Nymphaea elegans*, *Insecta*, USA, Texas 5209.
flowering phenology, *Pourouma cecropiifolia*, *Apis mellifera*, Brazil 4412.
flowering phenology, *Rollinia mucosa*, *Chrysomelidae*, Brazil 4410.
flowering phenology, seed set, *Linaris vulgaris*, *Insecta* 5203.
flowering phenology, *Solanum palinacatum* 4411.
flowers, feeding behavior, *Insecta* 2847
flowers, feeding, *Lejops vittata*, Netherlands 2061.
food sources, *Thuja occidentalis*, *Apis mellifera*, USA, Connecticut 4400.
foraging behavior, humidity effects on, *Apis mellifera*, *Zea mays* 2046.
host plants association, *Formica schaufussi*, *Diamorpha smalli* 1251.
host plants attractancy, *Helianthus annuus*, *Insecta* 7762.
host plants, flowering phenology, community structure, *Bombus* 1258.
host plants, flowering phenology, wind, *Insecta*, USA, Missouri 2047.
host plants, foraging behavior, *Bombus* 2050.
host plants, habitat, *Zenobia*, *Bombus* 3598.
host plants, *Minuartia groenlandica*, *Diptera*, *Hymenoptera*, USA, New Hampshire.
host plants population genetics, reproductive strategy, *Insecta* 3592.
host plants, reproductive strategy, *Ceratostyles*, *Ficus* 6781.
host plants, surveys, *Apoidea*, USSR 789
hybrids, agricultural practices, *Gossypium*, *Apis mellifera* 6182.
interspecific relationships, *Listera ovata*, *Ichneumonidae*, *Symphyla*, *Coleoptera*, *Diptera*, Sweden 5204.
interspecific relationships, *Trifolium pratense*, *Bombus* 5195.
orchards, agricultural practices, *Osmia lignaria propinqua* 5343.
orchards, agricultural practices, *Osmia lignaria propinqua* 6933
orchards, agricultural practices, *Osmia lignaria propinqua* 6935.
orchards, economic analysis, apiculture, *Apis mellifera* 1408.
outcrossing, interspecific relationships, *Bombus*, *Asclepias syriaca* 6780.
plants, interspecific relationships, mathematical models 523.
Prunus armeniaca, orchards, *Apis* 550.
reproduction, *Asarum caudatum*, *Diptera* 6786.
reproductive success, host plants, *Ficus glabrata*, *Agonidae* 2051.
- Pollinators**,
chemical perception, attractants, effects on foraging behavior, *Apis mellifera* 4577.
Claytonia virginica, *Andrena erigeniae*, *Bombus major*, USA, North Carolina 2065.
competition, flowering, *Centaurea scabiosa*, *Asclepias nigra* 6802.
competition, food sources, food availability, *Bombus* 6822.
competition, nectar production, *Centaurea scabiosa*, *Centaurea nigra* 6803.
contamination, pesticide residues, insecticides, *Megachile rotundata* 4317.
effects on cross-breeding, *Cajanus cajan*, *Insecta* 1235.
effects on host plants flowers color, *Hyles lineata*, *Aquilegia caerulea* 2834.
feeding behavior effects on flowers color, *Bombus*, *Trochilidae*, *Delphinium nelsoni* 1291.
feeding behavior, environmental effects, *Andrena erigeniae* 525.
foraging behavior, *Aralia hispida*, *Bombus* 8346.
foraging behavior, *Brassica oleracea capitata* crop fields, *Insecta* 5297.
foraging behavior, coevolution, *Trifolium pratense*, *Bombus* 5195.
foraging behavior, effects on reproduction, outcrossing, *Cochlospermum vitifolium*, *Centrus*, Panama 6787
foraging behavior, mathematical models, *Digitalis purpurea*, *Bombus* 5920.
foraging behavior, nectar dispersion, *Impatiens capensis* 6793.
foraging behavior, nesting behavior, *Diadema afflicta*, USA, Texas 9358.
foraging behavior, plasticity, *Bombus bifarius*, *Bombus flavifrons* 6736.
host plants, symbiosis, *Ficus*, *Agonidae* 2848.
interspecific relationships, outcrossing, *Asclepias syriaca*, *Bombus* 6780.
interspecific relationships, plants, mathematical models 523.
introduced species, dispersal, population establishment, orchards, *Osmia lignaria propinqua* 9295.
Melipona interrupta, synchronization, reproductive strategy, *Hybanthus prunifolius*, Panama 2080
morphology, keys, taxonomy, *Forcipomyia* 8054.
nectar, competition, population density, niche overlap, *Bombus* 2059.
population dynamics, flowering phenology, *Yucca whipplei*, *Tegeticula maculata* 8347.
population establishment, *Osmia lignaria propinqua*, USA, California 9286.
species composition, *Helianthus annuus*, *Hymenoptera*, USA, Texas, Lower Rio Grande Valley 9155
surveys, habitat, geographical distribution, *Syrphidae*, Denmark 5514.
- Polistes gallicus**,
occurrence, geographical distribution, Belgium 9484.
- Polluted environments**,
ponds, pest control, efficacy, *Bacillus thuringiensis israelensis*, *Culex peus*, *Culex pipiens* 8402
- Pollution effects**,
abundance, *Hexagenia*, *Agonia*, Erie L. 8619.
acid rain, occurrence, streams, *Siphonurus lacustris*, *Heptagenia lateralis*, British Isles, Scotland 8607
acute toxicity, endosulfan, *Enallagma* 292.
air pollution, population studies, reviews, *Insecta* 6689
alum, toxicity, *Tanytarsus dissimilis* 4218.
aminoacids, pesticide applications, activity, forests, *Arthropoda* 9212.
benzo(a)pyrene, bioaccumulation, depuration, *Chironomus riparius* 7813.
bioaccumulation, mercury, methylmercury, *Caliphoridae* 7354
cadmium uptake, nitrofluoroacetic acid chelation effects on, *Hydropsyche* 6584.
dieldrin, toxicity, *Blaberus discoidalis* 301
diflubenzuron, community composition, streams, *Insecta* 7024.
diflubenzuron, streams, community composition, toxicity testing, *Insecta* 9370.
exhausts, reproduction, aggressive behavior, disease resistance, *Apis mellifera* 1940.
insecticides, streams, abundance, organic matter, *Insecta* 7820
insecticides, streams, *Insecta* 5437
lead, bioaccumulation, *Apodius*, *Sphaeridium*, USA, Kansas 608
mutagenicity testing, herbicides, fungicides, insecticides, *Drosophila melanogaster* 4684
parasitism, eggs, *Telenomus aradi*, *Aradus cinnamomeus*, Finland 5934.
PCB, bioaccumulation, food chains, *Bacillus*, *Aedes aegypti*, *Lebistes reticulatus*

Pollution effects, (continued)

7811.
pest outbreaks, pest control, insecticides, temephos, *Simulium ornatum*, France, Neune R. Valley 4540.
pesticide residues, insecticides, toxicity, *Conophthorus monticolae* 296.
pesticides, uptake, *Culex pipiens* 4219.
population decline, Halipidae, Demark 5516.
sedimentation, nutrient enrichment, streams, Trichoptera, Diptera, Plecoptera, Ephemeroptera, USA, Appalachian Mts 7815.
sewage effluents, streams, community structure, Insecta, USA; Virginia 7814.
sulfur dioxide, chemoreception, host plants, pests, Insecta 5132.
sulfur dioxide, sexual reproduction, *Bracon hebetor* 7441.
temephos, community composition, streams, Insecta 7021.
toxicity, acephate, methamidophos, larvae, Insecta 315.
toxicity testing, methodology, sediments, deposit feeders, bioaccumulation, food chains 4314.
water pollution, colonization, artificial substrates, *Hygrobatas fluviatilis* 1939.
water pollution, community composition, streams, Chironomidae, Belgium, Antwerp 7810.
Pollution indicators,
cadmium uptake, nitrilotriacetic acid, chelation effects on, *Hydropsyche* 6584.
pollution monitoring, air pollution, *Humerobates rostrilamelatus*, Belgium 5984.
toxicity testing, diflubenzuron, streams, community composition, Insecta 9370.
Pollution levels,
heavy metals, bioaccumulation, *Oniscus asellus*, British Isles 8186.
Pollution monitoring,
air pollution, pollution indicators, *Humerobates rostrilamelatus*, Belgium 5984.
Poliopterus herculeanus,
taxonomy, morphology, larvae, phylogeny 5556.
Polycetenes,
larvicides, toxicity, *Aedes aegypti* 317.
toxicity, ultraviolet radiation effects on, *Aedes aegypti*, *Simulium vittatum* 295.
Polysia jurinei,
geographical distribution, nests structure, nesting behavior, Brazil 6222.
Polysia occidentalis,
defensive behavior, alarm behavior, alarm pheromone, attack 2795.
Polysia sericea,
trail pheromone, trail following behavior 4308.
Polycelis nigra,
predation, lakes, Insecta 1487.
Polycentropus francavillensis,
new species, Sicily 4066.
Polycentropus pirisinali,
new species, taxonomy, morphology, Italy 3234.
Polydesmus coriaceus,
juveniles, antennal sensilla, ultrastructure, electron microscopy 75.
Polydrusus laevis,
geographical distribution, occurrence, France 9457.
Polygamy,
population genetics, relatedness, queens, *Myrmica rubra* 6280.
Polygala tripus,
parasites, new records, Allantonemidae, South America 291.
Polygoidal,
effects on viruses disease transmission, host plants, *Myzus persicae* 6979.
Polygonia comma,
range extension, geographical distribution, Canada, Newfoundland 5523.
Polymorphism,
allozymes, genetic variance, geographical variations, *Drosophila subobscura* 3928.
allozymes, population genetics, *Drosophila*, Germany, Fed. Rep. 7061.
behavior, colonial characteristics, activity patterns, larvae, *Malacosoma americanum* 9359.
body size, colonial characteristics, castes, *Solenopsis invicta* 2275.
chromosomes, allozymes, reproductive isolation, *Caleda captiva* 3924.
chromosomes, hybrids, taxonomy, *Lasius niger*, *Lasius alienus* 3217.
chromosomes, relationship, malate dehydrogenase enzyme polymorphism, linkage selection, *Drosophila subobscura* 9394.
chromosomes, selection, statistical analysis, *Drosophila pseudoobscura* 3871.
color, clines, population genetics, *Phaulacridium vittatum* 2344.
color matching, visual stimuli, substrate preferences, *Circotetix rubula rubula* 4318.
coloration, *Euphydryas aurinia* trilineis, *Melitaea trivia* ventromillensis, Spain 6501.
coloration, genetic factors, *Araneus diadematus*, *Araneus marmoreus* 7064.
coloration, population genetics, *Armadillidium vulgare* 2342.
coloration, population genetics, *Enoplognatha ovata*, Europe 4473.
coloration, *Synthetodon tipuliformis* 5647.
coloration, vertical distribution, altitudes, *Elaphus americanus*, North America, Pacific Northwest 9217.
DNA, restriction endonuclease, *Drosophila* 3062.
ecological distribution, abundance, salt marshes, Delphacidae, USA, Florida 6833.
environmental effects, stress, population structure, castes, *Formica obscuripes* 1104.
enzymatic activity, population genetics, *Drosophila melanogaster* 1551.
enzymes, heterozygosity, parthenogenesis, *Drosophila mercatorum*, USA, Hawaii 3116.
enzymes, population structure, geographical distribution, *Drosophila pseudoobscura* 3127.
entomae, insecticides effects on, *Choristoneura occidentalis* 8202.
frequency, developmental stages, temperature effects, *Chaoborus americanus* 568.
genes, phosphoglucosylase, *Manosia crassipes*, *Manosia uniformis* 7872.
genes, structure variation, ribosomes, rRNA, *Drosophila melanogaster* 5448.
heterochromatin, characterization, *Drosophila melanogaster* 2327.
instars, colonial characteristics, *Macrotermes michaelseni* 435.
larvae, castes, *Macrotermes michaelseni* 1708.
Lyoneia clerkella, seasonal variations 2773.
neotix drive, genetic factors, models, *Aedes aegypti* 772.
metamorphosis, juvenile hormones role, Insecta 6573.
morphology, developmental stages, males, *Polystomophora ostiopluma* 2500.
morphology, founder effect, population genetics, *Eurylaeus villosulus* 4462.
morphology, larvae, *Catocala blandula* 8033.
morphology, *Shivaphis celti*, *Myzus varians*, India 6513.
new species, *Epanerchodus polymorphus*, USSR 6464.
phenotypes, larvae, *Arctioptyche grandis*, USA, Montana, Flathead R. Basin 1714.
pigmentation, energetics, photoperiod effects on, *Megoura* 2699.
pigmentation, larvae, *Choristoneura tumefacta* 5643.

Polymorphism, (continued)

- population genetics, fitness, environmental effects, *Drosophila melanogaster* 1555.
population genetics, models, colonies, sex ratio, Formicidae 3923.
predators chemical stimuli effects on, *Chaoborus americanus*, *Daphnia pulex* 572.
ref(2) locus, selection mechanisms, *Drosophila melanogaster* 7867.
seasonal variations, geographical distribution effects on, *Zonocerus variegatus* 465.
seasonal variations, photoperiod, *Lyoneia clerkella*, Japan 5236.
sex ratio, population structure, population genetics, *Acraea encodon* 7056.
temperature, effects on brachypterism, macropterism, *Pyrrhocoris apterus* 7465.
wings, host plants nutritional status effects on, *Nilaparvata lugens* 81.
xanthine dehydrogenase, modification, loci, *Drosophila melanogaster* 3069.
Polynema,
nomenclature, taxonomy 7987.
Polynema emu,
new species, taxonomy, morphology 7987.
Polynema mendeli,
synonymy, *Polynema oophaga* 4037.
Polynema oophaga,
synonymy, *Polynema mendeli* 4037.
Polynema robusta,
new species, taxonomy, morphology, Malaysia 4037.
Polypea,
taxonomy, morphology 4111.
Polypedium,
taxonomy, revision, biotyping 3198.
Polypedium vanderplanki,
tropical environment, habitat duration, pools, distribution, time 6832.
Polypeptides,
histone H2b, characterization, heat shock, *Drosophila* 7325.
Polyphagotarsonemus,
truss infestation, pests, control 741.
Polysia,
occurrence, geographical distribution, Mexico, Baja California 5532.
Polysia serrata,
pest resistance, allografts, mice 5275.
Polysia spinulosa,
parasitism, susceptibility, vitamin deficiencies effects on, *Rattus rattus* 6779.
Polysiphonization,
DNA biotization, fat body, growth, metamorphosis, *Schistocerca gregaria* 7832.
temperature effects, *Bombyx mori* 1520.
Polyploids,
development, ovary, histology, larvae, *Bombyx mori* 1087.
galls effects on meiosis, *Persea falcata*, Insecta 8343.
Polyploidy,
colcemid, meiosis, *Drosophila melanogaster* 6263.
fat body, juvenile hormones, *Locusta migratoria* 1775.
Polyrhachis,
volatiles, biochemical analysis 4995.
Polyrhachis decemdentata,
association, effects on ecological distribution, *Catantopus guineensis*, Ghana 578.
Polyribosomes,
protein biosynthesis induction, vitellogenesis, juvenile hormones, *Locusta migratoria* 190.
mRNA, nucleotide sequence, homology, developmental stages, *Drosophila melanogaster* 1539.
Polyrhachis guilfoyei,
effects on, biochemical characteristics, extracts development, reproduction, *Dysdercus cingulatus* 6650.
Polystomophora ostiopluma,
polymorphism, males, developmental stages, life history 2500.
Polytene,
chromosomes, absorption spectroscopy, *Drosophila melanogaster* 760.
chromosomes, antigenic characteristics, *Drosophila* 3073.
chromosomes, banding, *Anopheles stephensi* 5462.
chromosomes, banding patterns, *Drosophila hydei* 7849.
chromosomes, chromatin deletion, addition, *Drosophila ananensis* 5459.
chromosomes, dpp locus gene mapping, alleles complementation, *Drosophila melanogaster* 8635.
chromosomes, genes, structure, *Drosophila melanogaster* 3065.
chromosomes, heterochromatin, hybrids, *Drosophila mulleri*, *Drosophila arizonensis* 5464.
chromosomes, karyotypes, *Metanepha amphora*, *Metanepha variabilis* 5467.
chromosomes, puffing, aluminum effects on, *Simulium vittatum* 7860.
chromosomes, puffing, dimethyl sulfoxide effects on, *Chironomus tentans* 3881.
chromosomes, RNA biosynthesis, DNA methylation, *Sciara coprophila* 7833.
chromosomes, salivary gland, DNA, structure 7847.
chromosomes, staining, 2-propanol effects on, *Drosophila nebulosa* 7844.
puffing, temperature effects, larvae, *Chironomus plumosus* 761.
Polytenus lagurus,
sense organs, antennae, ultrastructure, 4140.
Polyzonium cyathiferum,
new species, taxonomy, morphology, USSR, Siberia 6463.
Polyzonium vaseri,
new species, taxonomy, morphology, USSR, Siberia 6463.
Pomplidae,
nesting behavior, predation, USA, Florida 1948.
synonymy, systematics 4032.
Pomplinae,
taxonomic revision, *Minotocypus*, *Ceropalinae* 8826.
taxonomy, keys, morphology, Argentina 1655.
Pomplis,
nomenclature, keys, biology 834.
Pomplis bohembornis,
synonymy, *Pomplis guentheri* 4032.
Pomplis cinereus,
prep 2146.
Pomplis guentheri,
synonymy, *Pomplis bohembornis* 4032.
systematics 4032.
Pomplis westerlundii,
systematics 4032.
Ponds,
abundance, biological control, Chironomidae 1007.

- Ponds, (continued)**
 brackishwater environment, population dynamics, *Chironomus decorus*, USA, New Jersey 7014.
 golf courses, pest control, growth regulators, *Tanytarsus*, *Chironomus*, *Procladius* 8546.
 polluted environments, pest control, efficacy, *Bacillus thuringiensis israelensis*, *Culex peus*, *Culex pipiens* 8402.
 population regulation, predators, Chaoborus, Cladocera 8616.
 predation effects on vertical distribution, abundance, *Acilius semisulcatus*, *Daphnia* pupae 5438.
 predation, larvae, eggs, *Ambystoma maculatum*, Chironomidae, Canada, Quebec 1203.
 riparian environments, overwintering, leaf litter, population density, *Gerris odontogaster* 6003.
 spatial distribution, developmental stages, cannibalism, *Notonecta lunata*, *Notonecta undulata* 7017.
 toxicity, pH, metals, Insecta, Canada, Northwest Territories 6696.
 toxicity, pH, metals, Orthocladus consobrinus, *Limnephilus pallens*, Chironomus riparius, Canada, Northwest Territories 6696.
 tundra, life cycle, Chironomus, USA, Alaska 5149.
 wastewater treatment, species composition, Culicidae, USA, Florida, Indian River Co 6045.
- Ponds, biological control, pest control, Dugesia tigrina, Culicidae, USA, North Carolina 2927.**
habitat, streams, coexistence, Dytiscidae, Culicidae, USA, Arizona, Dry Creek 9372.
 population dynamics, resource partitioning, competition, *Arctocoris carinata*, *Callicorixa producta* 6004.
 tropical environment, habitat duration, distribution, *Polypedium vanderplanki*, *Dasyheila thompsoni*, Chironomus imicola 6812.
- Popillia japonica,**
 catching methods, pheromone traps, lures, trap height 8499.
 competition, intraspecific relationships, instars, population density 2862.
 infection, pathogens, *Nomuraea rileyi* 5737.
 larvae, food preferences 490.
 population dynamics, agricultural ecosystems, *Glycine* max 6141.
 population studies, seasonal variations, developmental stages, competition, Scarabaeidae, USA, North Carolina 600.
 soil properties effects on survival, eggs, larvae 1864.
 temperature effects, simulation, development, emergence 367.
 trapping, attractants, sex pheromone 4632.
 traps, synthetic sex pheromone attractants, response 1930.
- Population changes,**
 natural disturbance, predation, effects on seasonal variations, coastal environment, Diptera 8602.
- Population characteristics,**
 learning behavior, memory, visual stimuli, *Drosophila* 2764.
 parasites infection, quantitation, *Nosema apis*, *Apis mellifera* 1024.
- Population control,**
 community composition, Insecta, salt marshes, herbivores, *Spartina* 2290.
- Population decline,**
 dieback, role, infection, *Dreyfusia*, *Abies alba*, Germany, Fed. Rep. 8342.
 endangered species, conservation, *Callosoma securifera*, North America 2106.
 environmental conditions, *Carterocephalus palaemon*, British Isles 4470.
 extinction, *Maculinea arion*, British Isles 2117.
 extinction, parasitoid effects on, *Xanthoxerus piliolum*, USA, New Jersey 2034.
 factors affecting, pest outbreaks, parasites, viruses, *Mythimna separata*, India 5301.
 interspecific relationships, host plants, *Zygaena trifolii* decreta, *Zygaena loniceræ*, British Isles 5224.
 mortality, surveys, *Saissetia oleae* 3620.
 parasitoids, introduced species, *Eriborus terebrans*, *Lydella thompsoni*, *Macrocentrus grandis*, USA, Iowa 6008.
 pathogens effects on, *Neozygites floridana*, *Tetranychus urticae* 8400.
 pest outbreaks, *Dasychia argentina*, Japan 3723.
 pests, environmental effects, grazing, weather, *Tabanus similis*, *Chrysops aestuans*, USA, South Dakota 4474.
 pollution effects, Haliphilidae, Denmark 5516.
 predation effects on, eggs, *Pala rosea* 8385.
 predators, effects on species composition, benthos, streams, *Salvelinus fontinalis*, Insecta 8613.
Prionus coriarius, German Dem. Rep. 4718.
 species composition, Microlepidoptera, British Isles, England, Sussex, Abbot's Wood 9219.
- Population density,**
 activity patterns, seasonal variations, Coleoptera, India, West Bengal 5256.
 aggregation behavior, singing sites, spatial distribution, males, *Amblycorypha parvipennis* 2286.
 Aphididae, effects on settling behavior, *Coccinella septempunctata* 2865.
 biological control, male sterility, pest control, models 714.
 breeding success, predation, *Magdica septendecim* 5983.
 breeding success, resource availability, oviposition, males, *Scatophaga stercoraria* 6857.
 brood care, seasonal variations, *Isotropha colera*, India 5418.
 burrowing behavior, seasonal variations, *Brachytripes portensis*, India, Nagaland, Medzipheema 4447.
 Cameraria, population regulation, host plants, *Quercus nigra* 2134.
 chemical control effects on, pheromones inhibitors, *Dendroctonus frontalis*, Ips avulsus 3788.
 chemical control, sulfur dioxide, prairies, *Melanophus sanguineus* 2990.
 crop fields infestation, *Sphenophorus callosus*, *Zea mays* 2249.
 crops damage, developmental stages, *Telegryllus commodus* 3827.
 cycles, host-parasite interactions, *Diatraea*, *Trichopria cubensis*, *Paratheresia clariipalpis*, Trinidad 5986.
 damage, host plants pest resistance, *Acyrtosiphon*, *Medicago sativa* 2256.
 diel activity, diel, nymphs, *Atalaphlebiodes*, Australia 754.
 diel variations, mathematical models, *Callosobruchus chinensis*, *Callosobruchus maculatus* 8371.
 dispersal, predator-prey interactions, environmental factors, *Amblyseius fallacis* 560.
 dispersal, survival, females, *Aedes africanus*, Uganda 1295.
 distribution, host plants, larvae, *Holotrichia consanguinea* 5364.
 distribution, *Magdica septendecim*, USA, Connecticut 8376.
 ecological distribution, disease transmission, *African trypanosomiasis*, *Glossina palpalis palpalis*, Ivory Coast 1342.
 ecological distribution effects on, *Hemileuca oliviae* 604.
- Population density, (continued)**
 effects on brood rearing, colonies, *Apis mellifera* 8233.
 effects on fertility, *Musca domestica* 384.
 effects on host-parasite interactions, parasitoids, Insecta 3575.
 effects on intraspecific relationships, host searching behavior, parasitoids, *Venturia canescens* 3652.
 effects on life history, fecundity, *Drosophila melanogaster* 2770.
 effects on mating, *Heliothis zea* 9298.
 effects on mortality, competition, *Callosobruchus maculatus*, *Callosobruchus chinensis* 5231.
 effects on reproduction, dung dispersal, *Onthophagus binodis* 7609.
 effects on territorial behavior, mating behavior, *Scatophaga stercoraria* 410.
 emergence, aggregation, *Magdica septendecim* 2154.
 environmental effects, competition, reproductive isolation, strains, *Drosophila melanogaster* 1545.
 environmental effects, neuroendocrine system, Insecta 3338.
 environmental factors, host-parasite interactions, *Dendroctonus frontalis*, *Dendroctonus valens*, *Heydenia unica*, *Rhopalus*, *Rhopalus xylophagorum* 505.
 estimation, environmental impact, statistical analysis, Insecta 4755.
 estimation, Lincoln Index, sampling methods, capture-recapture studies, *Dacus oleae* 5621.
 estimation, methodology, *Pala rosea* 4631.
 estimation, pheromone traps, *Earias insulana* 2078.
 estimation, pheromone traps, efficacy, *Spodoptera exigua* 2238.
 estimation, sampling methodology, *Rhynocylus conicus* 1695.
 estimation, spatial distribution effects on, *Graphognathus leucoloma* 606.
 estimation, trapping, *Musca vetustissima*, Australia 1311.
 factors affecting community composition, *Coccinellidae* 9191.
 fecundity, mature availability, *Onthophagus gazella* 5997.
 fecundity, models, *Sitophilus oryzae* 1282.
 food availability, territorial behavior, *Agelopsis apta* 2908.
 food sources, effects on feeding behavior, *Phytoseiulus persimilis*, *Amblyseius degenerans* 1206.
 food sources, effects on feeding behavior, predation, *Phytoseiulus persimilis*, *Amblyseius degenerans* 1205.
 geographical distribution, abundance, *Anopheles maculipennis*, Yugoslavia 3635.
 geographical distribution, Dryopidae, USA, Virginia, Clinch R., USA, Virginia, North Fork Holston R. 4658.
 Gracillariidae, larvae, plant hosts, *Quercus* 2135.
 grasslands, habitat, *Hemileuca oliviae*, USA, New Mexico 8374.
 habitat preferences, *Harpalus pennsylvanicus*, *Glycine* max 1174.
 herbivores, interspecific relationships, algae, Diptera, USA, California 3858.
 herbivores, population-environment relations, guilds, leafminers, Insecta 3632.
 host plants, effects on oviposition, competition, *Aphis melinus*, *Aphis lignanensis* 2166.
 host preferences, grasses, *Cicadellidae*, *Delphacidae* 710.
 hosts, effects on parasites fecundity, *Trichogramma pretiosum* 4373.
 hosts, effects on parasites, longevity, fecundity, *Aphelinus semiflavus*, *Acyrtosiphon pisum* 8318.
 hosts, effects on parasites population dynamics, *Gonia cinerascens*, *Galleria mellonella* 6773.
 hosts, host searching behavior, *Neodiprion sertifer*, *Lophyplectus luteator* 6757.
 hosts, parasites development, *Galleria mellonella*, *Gonia cinerascens* 2829.
 intraspecific relationships, competition, instars, *Popillia japonica* 2862.
 introduced species, *Tipula paludosa*, North America 2907.
 larvae, *Aedes*, Canada, Quebec, La Grande R. 567.
 larvae, chemical control, aminocarb, *Choristoneura fumiferana*, Canada, Quebec 1447.
 larvae, competition, dispersion, Chironomidae, USA, Michigan, Hunt Creek 2289.
 larvae, effects on pupation, *Tribolium freemani* 7469.
 larvae, feeding, leaves, *Pseudaletia unipuncta*, *Oryza sativa* 5949.
 larvae, paddy fields damage, *Tryporyza incertulus* 3001.
 larvae, predation, *Operophtera brumata*, British Isles, Mainland 565.
 larvae, seasonal variations, wells, *Anopheles stephensi* 616.
 limiting factors, food availability, *Picea abies*, *Glyptina hercynica* 2844.
 outbreaks, vegetation patterns, rangelands, *Acrididae*, USA, Arizona 6050.
 overwintering, leaf litter, ponds, riparian environments, *Gerris odontogaster* 6003.
 overwintering, *Phyllotreta cruciferae*, *Psylliodes punctulata*, *Phyllotreta strotolata* 1974.
 oviposition deterrents, pheromones, *Atherigona soccata* 1908.
 parasites, oviposition, host selection, competition, *Biostera longicaudatus* 2028.
 pest control, effects on mating, *Heliothis zea* 4610.
 pest control, isofenphos, Carabidae, *Staphylinidae* 9320.
 pest control, nuclear polyhedrosis virus, *Bacillus thuringiensis*, *Choristoneura occidentalis*, Canada, British Columbia 4589.
 pests, agricultural practices effects on, *Oryza sativa* crop fields, *Orseolia oryzae*, *Scirpophaga incertulus* 6947.
 pests, infestation, *Carica papaya*, *Dacus dorsalis* 8538.
 pests, *Oryza sativa*, *Nephotettix cinctipes*, Japan 2142.
 pollination, host plants habitat effects on, *Bombus*, *Zenobia* 3598.
 pollinators, nectar, competition, niche overlap, *Bombus* 2059.
 population growth, fitness, *Drosophila melanogaster* 2867.
 population-environment relations, environmental factors, pupae, spatial distribution, *Rhagoletis indifferens* 586.
 predation effects on, *Aves*, *Choristoneura occidentalis* 6026.
 predation effects on, *Toxorhynchites brevipalpis*, *Aedes aegypti* 7568.
 predator-prey interactions, *Coccinellidae*, *Acyrtosiphon pisum* 2886.
 predator-prey interactions, *Phytoseiulus persimilis*, *Tetranychus urticae* 2882.
 predator-prey interactions, temperature effects on, *Coleomegilla maculata*, *Myzus persicae* 6022.
 predators, crop fields, *Glycine* max, Arthropoda, USA, Virginia 6190.
 predators, effects on food consumption, predatory behavior, *Phytoseiulus persimilis*, *Amblyseius degenerans* 4466.
 predators, effects on survival, fecundity, dispersal, *Phytoseiulus persimilis*, *Amblyseius degenerans* 4468.
 predators, seeds, *Cirsium canescens*, *Paracantha culta*, *Orellia occidentalis*, *Homocidus typicellum* 9105.
 prey, foraging behavior, *Coccinellidae* 6739.
 prey, predator-prey interactions, cannibalism, *Paratenodera angustipennis* 3642.
 prey, predator-prey interactions, predators stability, *Notonecta hoffmanni* 3646.
 prey, predatory behavior, *Phytoseiulus persimilis*, *Amblyseius degenerans* 4350.
 sampling methodology, crop fields, larvae, *Anticarsia gemmatilis* 6114.
 sampling, methodology, *Glossina moritans*, Niger, Mozambique 1281.

Population density, (continued)

- sampling methodology, pests, crop fields, *Empoasca fabae*, *Medicago sativa* 8470
Scaphites obscurus, USA, Oregon 448
 seasonal variations, *Aedes albopictus*, Japan, Okinawajima 5897
 seasonal variations, *Chrysoteuchia topiaria* 5901
 seasonal variations, ponds, wastewater treatment, *Culicidae*, USA, Florida, Indian River Co. 6045
 seasonal variations, survival, capture-recapture studies, *Tenebrionidae* 595
 secondary production, *Heteroptera*, Czechoslovakia 2139
 species spacing, sound production, courtship, *Cynosoma saundersii* 2283
 soil fauna, Acari, Collembola, factors affecting, crop fields, India, Varanasi 4443
 soil fauna, Oribatida, Japan 8600
 soil fauna, overwintering, *Thysanoptera*, USA, Illinois 9367
 soil properties effects on, Acarina, Collembola 5254
 Sorghum host plants, effects on oviposition, *Athergona soccata* 6104
 spatial distribution, mathematical models 3625
 species composition, *Culicidae*, USSR, Baikal 9220
 surveys, *Aedes aegypti*, USA, Louisiana, New Orleans 3679
 surveys, pheromone traps, *Pseudophilus* includes, *Rachiplusia* on, *Trichophus* 11
Trichophus oxygramma, USA, Louisiana 8516
 trapping methodology, *Agrotis segetum*, *Agrotis ipsilon*, Zimbabwe 9179
 traps, *Dacus oleae*, Libya 6956
 variation, nests, *Delichon urbica urbica*, *Ceratothylus hurundinis*, *Ceratothylus farreni*, *Ceratothylus ruscus* 6030
- Population dynamics,**
 abundance, biomass, forests, seasonal variations, *Palomena prasina*, Czechoslovakia 1283
 abundance, community composition, forests soil, Acari 6000
 abundance, malaria vectors, *Anopheles aquasalis*, French Guiana 3689
 activation, crowding effects on, *Aphididae* 9208
 agricultural ecosystems, *Heliothis zea*, *Epiclacha varivestis*, *Popillia japonica*, *Glycine max* 6141
 annual cycles, *Diopsis thoracica*, Senegal 7753
 annual cycles, *Drosophila*, Japan, Mt. Soranuma 4463
 annual variations, environmental factors, *Vespa vulgaris*, *Vespa pensylvanica*, Pacific Ocean, Northwest 1268
Anopheles culicifacies, *Anopheles stephensi*, *Anopheles subpictus*, Pakistan, Punjab Province 3650
 association, *Catocala oxycampa*, *Catocala recta*, USA, New England 7613
 biogeography, pest control 5305
 biological control, herbivores, *Chrysomelidae*, agricultural ecosystems 2211
 biomimics, *Noctuidae*, Czechoslovakia 9182
 brackishwater environment, ponds, *Chironomus decorus*, USA, New Jersey 7014
 breeding, annual cycles, environmental factors, *Anopheles messeae messeae*, Germany, Fed. Rep. 3624
 breeding success, diapause effects on sex ratio, *Sarcophaga* 3605
 citrus blight vectors, *Cicadellidae*, USA, Florida 6174
 climatic characteristics, polymorphism, behavior, activity patterns, larvae, *Malacosoma americanum* 9359
 colonies, *Myrmica subuleti*, *Myrmica scabrinodis*, British Isles, England 6218
 community composition, water management effects on, *Culicidae*, Czechoslovakia, Moravia 7016
 comparison, biotypes, *Simulium*, USA, California 3866
 competition, resource partitioning, pools, *Arctocoris carinata*, *Callicorixa producta* 6004
 control programs, pests, conferences, *Athergona soccata* 4496
 crop fields, *Contarinia tritici*, *Stodoplois moellana*, Germany, Fed. Rep. 6859
 crop fields, *Myzus persicae*, *Brevicoryne brassicae*, *Hyadaphis erysimi*, *Macrosiphum euphorbiae*, USA, California 9349
 crop fields, pests, *Coccinella septempunctata*, Germany, Fed. Rep. 9339
 crop fields, *Vigan unguiculata*, *Phaseolus vulgaris*, *Empoasca Kraemeri*, Brazil 6044
 developmental stages, gynoparae, *Rhopalosiphum padi*, Finland 5226
 disease, emergence, *Megastigmus speculans*, *Megastigmus spermotiphilus* 5995
 diets, demography, *Aschlepias holomonensis* 6002
 disease transmission, malaria, *Anopheles albopictus*, Senegal, Pitkin 9239
 disease transmission, trypanosomiasis, *Glossina*, Ivory Coast 9264
 dispersal, *Drosophila*, USA, North Carolina 3634
 dispersal, flight activity, *Triphax virgata*, *Triphax borealis* 8360
 dispersal, survival, disease transmission, *Anopheles culicifacies*, India 1296
 dispersion, aggregation, sampling, *Heteronychia arator*, New Zealand, North Is 1300
 ecological distribution, *Haemaphysalis japonica* 9189
 effects on pest control, chemical control, models, *Malacosoma californicum pluviale* 1450
 energy output, body size, fecundity, females, *Sceliphron assimile* 1075
 environmental conditions, *Sorghum arundinaceum* host plants, *Athergona soccata*, Kenya 4432
 environmental effects, *Chortocetes teminifera* 7601
 environmental effects, crop fields, *Schizaphis graminum*, *Sorghum*, USA, Missouri 6151
 environmental effects, *Stomoxys calcitrans* 2148
 environmental effects, *Stomoxys calcitrans* 2148
 environmental effects, *Trypoxylon pallidariae*, Trinidad 2892
 epidemiology, pest outbreaks, *Metopolophium dirhodum*, *Sitobion avenae*, *Triticum* 4393
 estimation methodology, *Dendroctonus frontalis* 1278
 facilities, kitchens, houses, *Blattella germanica*, USA, North Carolina 6032
 fertilizer application effects on, *Schizaphis graminum* 8510
 flight activity, *Spodoptera exempta* 580
 fungi, *Uropodidae* effects on, forests, leaf litter, Romania 6006
 galleries construction, emergence, infestation, mathematical models, *Dendroctonus frontalis*, USA 3643
 geographical distribution, *Culex pipiens*, Africa 1316
Glossina morsitans submorsitans, *Glossina tachinoides*, Nigeria 5616
 gynoparae, life cycle, *Rhopalosiphum padi* 2681
 habitat, host plants, *Dacus*, *Brachymeria spiculosa*, Egypt 7591
 hibernation, *Euscelinus incisus*, German Dem. Rep., Thuringia 7575
 horizontal distribution, parasites, soil, *Steinernema kraussei*, *Cephalcia abietis* 9171
 host plants, feeding, *Insecta* 9165
 host plants, *Heliothis*, USA, Texas 6015
 host plants, *Ophiomyia simplex*, *Asparagus officinalis*, USA, Massachusetts 6134
 host-parasite interactions, adults, larvae, *Anastrepha fraterculus* 534
 host-parasite interactions, *Diatraea*, *Trichopoda cubensis*, *Parastheria*

Population dynamics, (continued)

- clarypalpis*, Trinidad 5986
 host-parasite interactions, parasitoids, *Insecta* 3575
 infestation, effects on forests community structure, *Dendroctonus frontalis* 3600
 introduced species, *Tipula paludosa*, North America 2907
 larvae, host plants, chemical composition, *Aedes triseriatus* 6818
 life cycle, *Aedes inornatus*, *Aedes aratus*, Japan, Yaeuima Is. 7574
 life cycle, development, chemotaxis, hosts, *Simulidae*, *Mammalia* 1190
 life cycle, *Empoasca kermi*, Pakistan 9161
 life cycle, generations, *Chironomus yoshimatsu*, Japan, Zempukuri R. 3556
 life cycle, *Megacricia septendecim* 8401
 life cycle, parasitoids, *Anthrax gideon*, *Anthrax analis* 8383
 life history, demography, *Drosophila melanogaster* 7065
 life history, environmental effects, *Heterosiphia pustulosa* 2860
 life history, environmental effects, *Simulidae* 1297
 life history, *Eobria chitonius oudemansi*, *Platynothrus skottsbergi* expansion, *Edwardsites elongatus* 5883
 life history, *Hemileia olivae*, USA, New Mexico 5899
 life history, *Hemileia truncum* 5136
 life history, *Nepticula castanopsella* 3561
 life history, pest control, *Athergona soccata*, Thailand 4568
 life history, pests, *Psocodes strobili*, *Pinus strobus*, USA, Maine 6187
 life history, *Pseudococcus longispinus*, New Zealand 459
 life history, reproductive behavior, *Lycosa pseudoannulata*, China, People's Rep. 5879
 life history, *Tabanidae*, Brazil, Manaus 4426
 male sterility, biological control, mathematical models, *Insecta* 2943
 markers, estrase inheritance, *Anthonomus grandis grandis* 8661
 mathematical models, *Aphididae* 8361
 mathematical models, *Oribates* 6837
 mating behavior, capture-recapture studies, *Anopheles culicifacies*, Pakistan 7602
 migrations, thermoregulatory behavior, *Danaua plexippus* 6846
 models, role, pest control, *Insecta* 4435
 monitoring, embryos, *Macrosiphum euphorbiae* 2873
 monitoring methodology, pests, *Aphididae* 725
 mortality, *Aedes africanus*, Uganda 8369
 mortality, killing power, mathematical models, *Insecta* 3638
 mortality, larvae, *Danaua plexippus*, *Danaua chrysippus* 7610
 natural, longevity, sampling, *Metaphysus sanguineus* 5994
 natural enemies effects on, *Sitobion avenae*, *Metopolophium dirhodum*, British Isles 8394
 natural enemies, predation, *Insecta* 8386
 nesting, colonial characteristics, *Vespa maculifrons* 6988
 oviposition, development, pest resistance, *Solanum berthaultii*, *Leptinotarsa decemlineata* 4467
 oviposition, parasites, *Euplectrus platyneura* 1149
 oviposition, predation, *Aphelinus thomsoni*, *Drepanosiphum platanoideis* 2887
 parasites, *Ectenesia spasma*, *Megadiera spasma* 4487
 parasites, hosts population density effects on, *Gonia cinerascens*, *Galleria mellonella* 6773
 parasites, *Ixodidae*, *Microtus canaliculatus* 6777
 parasites, effects on hosts abundance, *Trichopoda guacemellii*, *Nezara viridula* 2018
 pest control, biological control, pathogens, mathematical models, *Insecta* 8452
 pest control, *Brevipalpus phoenicis*, Indonesia 5388
 pest control, parasites, *Spalangia endius*, *Musca domestica* 6903
 pest control, parasitoids, urban environment, *Rhopalosiphum californicum*, USA, California 4572
 pest control, pheromone traps, *Prays citri*, Israel 4594
 pest control, sterile-release efficacy, models 5341
 pest outbreaks, *Dasychira argentata*, Japan 3723
 pest outbreaks, environmental factors, *Helicoverpa armigera*, India, Jabalpur 7669
 pest outbreaks, infestation, mathematical models, *Dendroctonus frontalis*, USA 3644
 pest outbreaks, *Leptinotarsa decemlineata*, British Isles 6898
 pest outbreaks, mathematical models, *Choristoneura fumiferana* 3802
 pest outbreaks, mathematical models, *Choristoneura fumiferana* 6904
 pests, association, phenology, *Glycine max*, *Nezara viridula* 8351
 pests, *Bemisia tabaci*, Jordan 7622
 pests, *Ceroplastes floricornis*, Egypt 6949
 pests, control programs, biological control, chemical control, *Earias*, *Pectinophora gossypiella* 1444
 pests, crop fields, *Brassica oleracea*, *Myzus persicae*, *Brevicoryne brassicae*, USA, California 4608
 pests, crop fields, *Cephus cinctus*, *Triticum* 8464
 pests, *Deos flavopicta*, *Zulia trenrenana*, pests 6158
 pests, *Gossypium* yield, *Heliothis zea* 8516
 pests, host plants, *Brassica*, *Laphis erysimi*, India 7776
 pests, *Myzus persicae*, *Aphis gossypii*, *Empoasca decipiens*, *Solanum tuberosum*, Egypt 6958
 pests, natural enemies, *Insecta*, conferences 8672
 pests, orchards, *Dacus oleae*, *Olea europaea*, Crete 7798
 pests, orchards, *Malus*, *Lithocolletus blancardella*, Switzerland 6918
 pests, orchards, *Prunus persica*, *Grapholita molesta*, Brazil 6034
 pests, ornamental plants, *Macrosiphum rosae*, *Macrosiphum rosaeformis* 4530
 pests, *Spodoptera frugiperda*, *Heliothis zea*, Guadeloupe 6870
 pests, weather, *Lepidoptera*, Brazil 6834
 pests, *Zeiraphera ditana*, France 8450
 phenology, coloration, *Saussurea oleae*, Israel 9178
 phenology, life cycle, mathematical models, *Choristoneura fumiferana* 8285
 phenology, temperature effects on development, *Spodoptera frugiperda* 6031
Polistes exilis, predation, parasites 2155
 pollinators, flowering phenology, *Yucca whipplei*, *Tegestula maculata* 8347
 polymorphism, coloration, population genetics, *Enoplognatha ovata*, Europe 4473
 population growth, probability, *Tribolium* 3647
 population levels, sampling methodology, *Glossina morsitans*, *Glossina pallidipes* 5274
 population regulation, life history, *Papilio xuthus* 2859
 population regulation, parasites, predators, *Cydia pychora* 8381
 population regulation, pest outbreaks, *Costelytra zealandica*, *Heteronychia arator*, New Zealand 6911
 population regulation, predators, *Chaoborus*, *Cladocera* 8616
 population structure, seasonal variations, *Orchestia calica* 6001
 predator-prey interactions, age composition, mathematical models, *Acarina* 7596

Population dynamics, (continued)

- predator-prey interactions, biological control, *Acyrtosiphon pisum* 2866
 predator-prey interactions, Coccinellidae, *Acyrtosiphon pisum* 2866
 predator-prey interactions, mathematical models, *Atheta coraria*, *Stelidota* *germinata* 9204
 predator-prey interactions, movements, *Coccinella californica*, *Coccinella* *lufasciata*, *Acyrtosiphon pisum* 2877
 predator-prey interactions, *Phytoseiulus persimilis*, *Tetranychus urticae* 2882
 predators, Carabidae, British Isles, England 8387
 predators, orchards, predator-prey interactions, *Psylla pyri*, *Panonychus ulmi* 6211
 rearing, survival, development, *Spodoptera exempta*, Kenya 1310
 reproductive behavior, mate selection, *Cytosoma saundersi* 2748
 reproductive strategy, *Syneca surinama* 5222
 reservoirs, *Aedes*, USSR, Armenia, Sayany Reservoir 9374
 salinity effects, *Anopheles merus*, Kenya 3616
 seasonal variations, *Athergona*, Upper Volta 4431
 seasonal variations, *Branchyca*, *Cyclorhapha*, Czechoslovakia 7101
 seasonal variations, distribution, new records, Braconidae, Czechoslovakia, Vah R. 573
 seasonal variations, feeding, production, Acrididae, South Africa 8365
 seasonal variations, life history, Chironomidae, British Isles, England 4659
 seasonal variations, mortality, population-environment relations, *Heteronychus* *arator*, New Zealand, North Is. 1301
 seasonal variations, sex ratio, hatching, *Aedes triseriatus*, USA, Indiana 1266
 seasonal variations, temperature effects, mathematical models, *Heteronychus* *arator*, New Zealand, North Is. 1302
 self-regulation, environmental factors, mathematical models, Chitty Hypothesis, Insecta 9184
 sex ratio, colonial characteristics, *Apterostigma dentigerum* 3846
 sexual reproduction, nesting behavior, *Eumenes allaudi*, Seychelles, Cousin I. 5903
 soil fauna, seasonal variations, Arthropoda, Czechoslovakia 7599
 soil properties effects on, *Acarna*, *Collemola* 5254
 soil properties effects on, plantations, Cryptosigmatidae 5249
 spatial distribution, seasonal variations, adults, forests, *Monochamus alternatus* 4428
 spatial distribution, time variation, mathematical models, Insecta 5239
 species composition, crop fields, Araneae, Opiliones, German Dem. Rep., Leipzig 4571
 species composition, water chemistry, *Aedes* 9376
 stability, colonies, mathematical models, *Myrmica lunicata* *jacobsoni* 8380
 sterile release, males, competition, mathematical models 6077
 stored products pests, *Tritum*, *Stipophilus oryzae*, *Trogoderma granarium*, *Tribolium castaneum* 5330
 survival, colonies, *Pogonomyrmex occidentalis*, USA, Nebraska 6987
 temperature effects, *Myzus persicae* 1275
 temperature, host-parasite interactions, *Phytomyza ranunculii*, *Chrysanthrus* *pentheus*, *Diglyphis pusztensis* 7577
 resource partitioning, host plants, habitat, *Muellanella* 3633
Population establishment
 abundance, urban environments, *Vespa germanica*, *Vespa maculifrons*, [USA, New Jersey 9200
 abundance, *Vespa germanica*, *Vespa maculifrons*, USA, New Jersey 6326
 parasitism, biological control, *Romanomermis culicivora*, *Aedes polynesiensis*, Tokelau Is. 7630
 pollinators, introduced species, dispersal, orchards, *Osmia lignaria propinqua* 9295
 pollinators, *Osmia lignaria propinqua*, USA, California 9286
Population genetics
Aedes *luteus* genetic variance, restriction endonuclease mapping, *Drosophila melanogaster* 9425
 African trypanosomiasis, epidemiology, *Glossina* 1336
 allozymes, polymorphism, *Drosophila*, Germany, Fed. Rep. 7061
 allozymes, stability, seasonal variations, *Drosophila melanogaster* 3129
 allozymes variance, population structure, genetic relationship, *Nothomyrmica* *macrops*, Australia 3123
 antennal sensilla, inheritance, *Apis mellifera* 7060
 biotypes, pests, *Nilaparvata lugens* 3604
Choristoneura occidentalis, *Choristoneura biennis*, *Choristoneura retiniana*, *Choristoneura lambertana*, *Choristoneura fumiferana*, North America 3130
 chromosomes, geographical variations, *Locusta migratoria* 4696
 chromosomes inversions, clines, *Drosophila melanogaster*, Australia 3113
 chromosomes, races, *Culex pipiens* 3111
 chromosomes, taxonomy, *Lygaeus kalmi* 6282
 chromosomes transmission, *Drosophila melanogaster*, USA, Texas 3126
 colonial characteristics, mating behavior, *Lasius sakagami* 2276
 colonization, geographical distribution, *Drosophila subobscura*, Chile 1578
 coloration, polymorphism, *Armadillidium vulgare* 2342
 coloration polymorphism, population structure, *Enoplognatha ovata*, Europe 4473
 consanguinity, *Apis mellifera* 8666
 cross-resistance, host plants defense mechanisms, pesticides, *Tetranychus urticae* 6284
 , DDT pesticide resistance, bioaccumulation 1015
 densonucleosis virus infection susceptibility, *Bombyx mori* 2351
 ecological distribution, sympatric populations, *Aedes*, Kenya 2868
 enzymatic activity, alcohol dehydrogenase, *Drosophila melanogaster* 1761
 enzymatic activity, alcohol dehydrogenase, genetic control, *Drosophila melanogaster* 2343
 enzymatic activity, pesticide resistance, pirimicarb, *Apis gossypii* 3922
 enzymatic activity, polymorphism, *Drosophila melanogaster* 1551
 enzymatic activity, reproductive isolation, *Phlebotomus perfluvii* *perfluvii*, Italy 3133
 enzymatic activity variability, *Drosophila melanogaster* 3067
 enzyme polymorphism, alcohol dehydrogenase, environmental effects, *Drosophila melanogaster* 5492
 enzyme polymorphism, *Glossina* palidipides, Kenya 6286
 enzymes electrophoresis, genetic relationship, taxonomy, *Euchloe simpsona*, *Euchloe crameri* 8662
 evolution, *Drosophila*, USA, Hawaii 5502.

Population genetics, (continued)

- evolution, group selection, *Tribolium confusum* 9426
 fitness, inversion, epistasis, *Drosophila melanogaster* 2319
 fitness, polymorphism, environmental effects, *Drosophila melanogaster* 1555
 genetic load, *Drosophila willistonii*, Colombia 9429
 genetic load, *Melipona scutellaris* 5495
 genetic relationship, colonial characteristics, social behavior, measuring techniques, Insecta 7871
 genetic variance, allozymes, *Xestia* 8660
 genetic variance, body weight, melanization, genotype-environment interactions, *Alsophila pomatoria* 8664
 genetic variance, carriers preferences, phoretic behavior, *Peciloclurus necrophorus* 8663
 genetic variance, chromosomes, *Anopheles* 4693
 genetic variance, cocoons, *Bombyx mori* 9428
 genetic variance, enzymes, strains, *Glossina morsitans morsitans* 7876
 genetic variance, host plants, *Perithia glyptopa*, *Eucalyptus marginata*, *Eucalyptus rudis* 7875
 genetic variance, loci, enzymes, alcohol dehydrogenase, *Coelopa frigida* 6278
 genetic variance, *Musca autumnalis* 9423
 genetic variance, peptide mapping, alcohol dehydrogenase, *Drosophila melanogaster* 7874
 genotype-environment interactions, *Nymphalis antiopa*, North America 5497
 geographical distribution, enzymes polymorphism, *Drosophila* 2349
 geographical distribution, enzymes heterozygosity, *Drosophila* 2349
 geographical distribution, polymorphism, enzymes, *Drosophila pseudoobscura* 3127
 geographical variations, enzymes activity, gene frequency, *Drosophila melanogaster* 6283
 geographical variations, polymorphism, allozymes, *Drosophila subobscura* 3928
 heterozygosity, enzymes polymorphism, *Drosophila mercetorum*, USA, Hawaii 3116
 host plants pest resistance, damage, *Empoasca kraenerti*, *Phaeoecia lunata* 8459
 inheritance, phenotypes, nigrescens, *Pachynema hippocastanaria* 6285
 inheritance, sulfur resistance, *Metasulcius occidentalis* 5493
 interspecific hybridization, DNA reassociation, *Drosophila* 1557
 intraspecific hybridization, heterosis, *Drosophila ananassae*, India 3915
 islands, *Drosophila algonquin*, USA, Maine Coast 9435
 karyotypes, *Glyptotendipes barbipes*, USSR 4695
 karyotypes, heterozygosity, *Chironomus annularius* 8656
 karyotypes, simulations, *Tetranychus urticae* 1549
 laboratory animals, quality control, heterozygosity, *Choristoneura occidentalis* 8658
 linkage disequilibrium, *Drosophila montana*, USA, Utah 1558
 malaria vectors, *Plasmodium* susceptibility, *Anopheles* 7629
 malate dehydrogenase activity, comparison, Africanized honey bee, *Apis mellifera adansonii* 7062
 males breeding success, genetic variance, fitness, *Drosophila melanogaster*, *Drosophila pseudoobscura* 3125
 mating, multiple unsemination, *Drosophila subobscura* 3921
 migrations, deserts, *Drosophila*, USA, California, Death Valley 6814
 models, colonies, polymorphism, sex ratio, *Formicidae* 3923
 morphology, inheritance, *Cyclophora albipunctata subrosea*, British Isles 4690
 morphology, polymorphism, founder effect, *Elymus villosus* 4462
 multiple mating, sperm displacement, mathematical models, *Drosophila melanogaster* 9431
 natural selection, communication, evolution, behavior, *Scolytidae* 4699
 parasites, infectivity, evolution, *Hymenolepis citelli*, *Tribolium confusum* 8998
 pest control, Y chromosome translocations, *Lucilia cuprina* 2348
 pesticide resistance, DDT, chlorophos, *Cimex lectularius* 9434
 pesticide resistance evolution, control programs, *Culicidae* 5501
 pesticide resistance evolution, models, Insecta 6289
 pesticide resistance, Insecta 9424
 pesticide resistance, malathion, *Epiplatna sparsa* 5498
 pesticide resistance, mathematical models, *Glossina morsitans morsitans* 3122
 pesticide resistance, permethrin, azinphos-methyl, *Amblyseius fallalis* 1063
 pesticide resistance, selection, *Amblyseius fallalis*, *Tetranychus urticae* 3128
 pesticide resistance, selection, dimethoate, *Musca domestica* 3124
 pesticide resistance, selection, *Hylemyia antiqua* 8665
 phylogeny, breeding success, *Drosophila* 6296
 pollen, dispersal, *Diamorpha smallii*, *Formica* 553
 polymorphism, color, clines, *Phaulacridium vittatum* 2344
 population stability, selection, *Drosophila melanogaster* 2864
 population structure, courtship, mating behavior, *Drosophila primaeva*, Hawaii 1554
 population structure, genotypes, polygyny, *Formica transcaucasica*, *Formica polyctena*, *Formica aquilonia* 5494
 population structure, pesticide resistance, Insecta 5500
 population structure, sex ratio, polymorphism, *Acraea encedon* 7056
 protein composition, gene localization, *Drosophila melanogaster* 2350
 relatedness, queens, polygyny, *Myrmica rubra* 6280
 reproductive behavior, oviposition, *Aganippe* 2051
 reproductive isolation, *Drosophila immigrans*, Australia, Melbourne 5490
 reproductive strategy, divergence, temperate environment, tropical environment, *Drosophila melanogaster* 7057
 reproductive strategy, flowering, pollination, Insecta 3592
 selection, egg production, development, media (culture), *Tribolium castaneum* 1980
 selection, fecundity, *Drosophila melanogaster* 3120
 sex chromosomes, sex ratio diversity, *Drosophila melanogaster* 3119
 sex chromosomes translocations, *Kalotermes approximatus* 3892
 sex determination, apiculture, breeding, *Apis mellifera* 8659
 sex determination, sex chromosomes, *Pycnogaster cucullata*, Iberian Peninsula 7055
 sex isolation, hybridization, sterility, *Drosophila melanogaster* 6281
 sex ratio, *Drosophila pseudoobscura*, USA, California 6279
 sex ratio evolution, *Hymenoptera* 7058
 sex ratio, x chromosome, *Drosophila melanogaster* 5499
 sex ratios, genetic factors, selection, *Tribolium castaneum* 1561
 sex ratios, *Phyllonorycter sorbicola*, Japan 2347
 speciation, electrophoresis, *Anopheles hyrcanus* 1565
 subdivision, fecundity, fitness, *Tribolium castaneum* 3603
 sympatric populations, speciation, *Anopheles farauti*, Australia 1556
Population growth
 abundance effects on, *Cetraria delisei*, *Hypogastura fulbergi*, Norway 5267
 age composition, temperature effects, *Glossina* 1307
 colonial characteristics, mathematical models, *Myrmica* 3049
 competition, productivity, *Stipophilus oryzae*, *Stipophilus granarius* 7595

Population growth, (continued)

- control programs, pests, *Sitophilus oryzae* 5333.
decamethrin effects on, crop fields, *Nilaparvata lugens* 6111.
fecundity, *Lymnasia dispar*, North America 1972.
fecundity, pollen diets effects on, *Amblyseius hibisci* 7572.
grain, stored products pests, *Sitophilus zeamais*, *Tribolium castaneum* 5344.
grain effects on, *Sitophilus zeamais*, *Tribolium castaneum* 9048.
host-parasite interactions, *Brachionus hebetor*, *Ephestia cautella*, *Achroia grisella*, *Galleria mellonella* 1227.
insecticides effects on, pest control, *Nilaparvata lugens* 6162.
life history, *Amblyseius longispinosus*, *Amblyseius delongi*, *Amblyseius paraki*, Japan 1184.
nests, *Medicago sativa*, *Pithitis smaragdula* 7564.
parasites, seasonal variations, *Psoroptes ovis*, USA, Texas 517.
pest outbreaks, *Choristoneura occidentalis*, *Diorcorys renicellulosa*, *Zeiraphera besperiana*, *Nematocampa filamentaria*, *Grisella radicans*, *Acletois gloveriana*, USA, Idaho 9305.
pests, grain, *Zea mays*, *Sorghum bicolor*, *Heliothis armigera* 5329.
pests, host plants varieties, *Scaphium litura*, *Arachis hypogaea* 6913.
pests, mushrooms cultivation, composts, *Lycorella mali* 6172.
pests, succession, *Oryza sativa*, *Insecta*, India 7783.
pests, *Sylepta derogata*, *Gossypium* 9282.
phenotypes, alate/immature nymphs, crowding, host plants, *Sitobion avenae* 6023.
Phytia infusella 9194.
population density, fitness, *Drosophila melanogaster* 2867.
population dynamics, probability, *Tribolium* 3647.
races, abundance, fecundity, *Aphis gossypii* 1306.
reproduction, pests, *Culex* 6408, Hungary 7703.
reproductive strategy, *Wolpertia nigromaculata* 6862.
survival, temperature effects, *Anthonomus grandis* 3641.
temperature effects, *Myzus persicae* 1275.
temperature, pests, *Toxoptera cinctus*, *Aphis citricola*, *Aphis gossypii* 7619.
- Population levels,**
abundance, estimation methodology, *Aphis eugeniae* 2489.
abundance, pesticide applications effects on, *Sitobion avenae* 3724.
abundance, emergence, effects on, predatory behavior, *Polistes chinensis* 2788.
colonization, crops, *Aphididae* 2891.
coprophilous fungi, grazing, *Lycorella mali* 4479.
disease transmission, trypanosomiasis, *Glossina*, Ivory Coast 9238.
ectoparasites, seasonal variations, *Arthropoda*, *Pediceus phasianellus*, Canada, Manitoba 1230.
environmental effects, land use, *Collembola*, *Oribatei*, USSR, Kolthida 7010.
estimation, *Aphis gossypii*, Central African Republic 2899.
estimation methodology, mass rearing, *Drosophila melanogaster* 2487.
estimation, pests, *Heliothis virescens*, *Heliothis zea*, *Nicotiana tabacum* 8536.
estimation, pests, ships, *Blattella germanica* 2162.
estimation, sampling methodology, *Stomoxys nigra* 46.
estimation, traps, *Glossina* 2936.
growth rates, age composition, temperature effects, *Glossina* 1307.
harvesting effects on, pest control, *Agropyron desertorum*, *Lobos hesperius* 8512.
host plants, pest resistance, *Zea mays*, *Sodoptera frugiperda* 5395.
host plants phenology, *Oms isidius* 1253.
insecticides effects on, longevity, fecundity, *Tetranychus turkestani* 2893.
larvae, winter, *Anticarsia gemmatilis*, USA, Mississippi 1273.
monitoring, attractants, *Cydia nigricana* 3022.
monitoring, crop protection, chemical control, *Insecta* 3714.
monitoring, pest control, *Psila rosae* 3009.
natural enemies effects on, *Cydia pomonella*, British Isles 8397.
parasites, predators effects on, *Rhagothrips conicus* 3993.
pasture defoliation effects on, soil temperature, *Costelya zealandica* 545.
pathogens, parasites, *Nosema pyrausta*, *Macrocentrus grandii*, *Ostrinia nubilalis* 5356.
pest control, biological control, parasites, *Aleurocanthus woglumi*, USA, Florida 2946.
pest outbreaks detection, control programs, pheromone traps, *Heliothis armigera* 6183.
pests, infestation prediction, *Aphis fabae*, *Vicia faba* 2969.
pests, measuring techniques, *Pseudotsuga menziesii* stands, *Choristoneura occidentalis* 8478.
pests, predation, *Agelais phoeniceus*, *Ostrinia nubilalis*, Canada, Quebec, Beauharnois 52.
pests, *Scaphium officinale* crop fields, *Elaeagnus*, Brazil, Sao Paulo 6098.
pests, spatial distribution, host plants, microclimate, *Aonidiella aurantii*, Greece, Crete 1256.
pests, *Tabanus*, *Chrysops*, USA, South Dakota 8576.
pheromone traps, attractancy, *Homoeosoma electellum* 5702.
pheromone traps, correlation, infestation, *Psylla oleae*, Spain, Granada 9281.
pheromone traps, flight activity, *Conopsea myraeforma* 6953.
predation, natural enemies, effects on, *Sitobion avenae*, *Metopolophium dirhodum*, *Metopolophium festucae*, British Isles 8389.
predator-prey interactions, *Carabidae*, *Myzus persicae*, British Isles 8391.
predictions, eggs, trapping, females, *Dyala coarctata* 1290.
rare species, *Strymonia de-album*, British Isles 5909.
sampling methodology, crop fields, *Zea mays*, *Diatraea longicornis* 6120.
sampling methodology, *Glossina moritans*, *Glossina pallidipes* 5274.
sampling methodology, *Hypera postica*, *Sitona hispidulus*, *Hypera punctata* 5626.
sampling, *Phlebotomus ariasi*, *Phlebotomus perniciosus* 59.
seasonal variations, *Anopheles culicifacies*, *Anopheles stephensi*, *Anopheles subpictus*, Pakistan, Punjab Province 3650.
seasonal variations, *Chironomus decorus*, USA, New Jersey 5243.
seasonal variations, host plants abundance, *Myzus persicae*, USA, Washington 598.
seasonal variations, larvae, *Rhagothrips oleae*, *Autographa biloba*, USA, Florida 1244.
species composition, nests, *Mammalia*, *Collembola* 570.
statistical analysis, *Phidionomus cespitum* 9176.
vectors, disease control, filariasis, *Anopheles farauti*, Guadalcanal 1357.
workers, marking methodology, *europium*, *Myrmica rubra*, *Myrmica scabrinodis*, *Lasius niger* 6981.

Population numbers,

temporal variations, interspecific relationships, horses, *Tabanidae* 1376.

Population regulation,

- biological control, predation, *Pseudococcus*, *Saissetia oleae*, *Cryptolaemus montrouzei* 3611.
Camelaria, population density, host plants, *Cynopoma nigra* 2134.
Cleptoparasitism effects on, *Coeloxys ruficaudata*, *Megachile rotundata* 4375.

Population regulation, (continued)

- colonies, cannibalism, queens, *Hemiptera* 1479.
crowding effects on fecundity, *Epiphyas postvittana* 6011.
ectoparasites, *Aphis nerii*, *Nerium oleander*, USA, California 1276.
mortality, food availability, temperature effects, *Dendroctonus ponderosa* 1299.
pathogens, infection, *Triploponum*, *Tetranychus evansi*, Brazil 4197.
pest control, biological control, pathogens, parasites, interaction, models 1455.
pest control, *Parus*, *Insecta*, Turkey 619.
pest outbreaks, biological control, models 6142.
pest outbreaks, environmental effects, *Costelya zealandica*, *Heteronychus arator*, New Zealand 6911.
pests, predators, *Aphis craccivora*, *Vigna sinensis* 9188.
population dynamics, life history, *Papius xuthus* 2859.
population dynamics, parasites, predators, *Cydia pythorcha* 8381.
population dynamics, seasonal variations, mortality, *Heteronychus arator*, New Zealand, North 1401.
predation, *Hyparchaea parsonsii*, Oman 5215.
predators, ponds, *Chaoborus*, *Cladocera* 8616.
- Population stability,**
population genetics, selection, *Drosophila melanogaster* 2864.
rearing, source effects on, *Glossina pallidipes*, Kenya 574.
- Population status,**
crop fields, *Aphididae*, British Isles 6927.
occurrence, *Cicadella columbica*, USA, Idaho, Salmon R. 7120.
parasites, *Ostrinia nubilalis*, *Eriborus terebrans*, *Macrocentrus grandii*, *Aploia caesar*, *Lixophaga*, USA, Connecticut 8399.
- Population structure,**
Acan, orchards, Malus, USA, North Carolina 588.
age, allometric populations, *Glossina pallidipes*, Kenya 8466.
age, breeding, *Tabanidae*, Switzerland 4449.
age composition, seasonal variations, *Oreohelina cincta* 6001.
age distribution, life span, *Aradus cinnamomeus*, Finland, Hanko Peninsula 5217.
aging methods, methodology, oogenesis, *Culicoides varipennis*, *varipennis* 4081.
association, host plants, *Aphididae* 4372.
castes, seasonal variations, *Reticulitermes flavipes*, USA, Mississippi 2137.
colonial characteristics, workers, males, queens, *Bombus perplexus* 9366.
ecological distribution, feeding, *Tytus trivittatus fasciatus*, Brazil 6838.
environmental conditions, hydrology, streams, *Hydropsychidae* 9373.
environmental effects, stress, castes, *Formica obscuripes* 1304.
fecundity, unknown, reasons, *Blattella germanica* USA, North Carolina 6032.
genetic relationship, *Nyctomyia macropus*, Australia 5125.
genotypes, polygyny, *Formica transcaucasica*, *Formica polyctena*, *Formica aquilonia* 5494.
geographical distribution, dunes, coastal zone, *Odonata*, Australia, Queensland 4457.
geographical distribution, polymorphism, enzymes, *Drosophila pseudoobscura* 3127.
life history, *Aradus cinnamomeus*, Finland 1466.
parasites, *Ectoparasitae*, *Megadema spasma* 4387.
pests, ships, *Blattella germanica* 2162.
polymorphism, population genetics, *Enoplognatha ovata*, Europe 4473.
population genetics, courtship, mating behavior, *Drosophila primaeva*, Hawaii 1554.
population genetics, morphology, polymorphism, *Evallus villosus* 4462.
population genetics, pesticide resistance, *Insecta* 5800.
seasonal variations, physical activity, *Proteronulus fusus*, Finland 5242.
sex ratio, abundance, association, colonies, *Reticulitermes flavipes* 585.
sex ratio, annual variations, *Osmia lignaria*, USA, Utah 6871.
sex ratio, *Belgica antarctica*, Antarctica 6016.
sex ratio, *Carabidae*, New Zealand, Banks Peninsula 6868.
sex ratio, polymorphism, population genetics, *Acraea cecidon* 7056.
sex ratio, population dynamics, *Cydia pythorcha* 8381.
sex ratio, *Scymnus lividigaster*, *Leptochia galbula*, Australia 2863.
sex ratios, *Phylloxera sorbeola*, Japan 2347.
species composition, abundance, distribution, disease spread, historical account, vectors, *Phlebotomus papatasi*, *Phlebotomus sergenti*, Yugoslavia, Serbia 602.
- Population studies,**
africanized honeybees identification, enzymes, electrophoresis, *Apis mellifera* 8026.
age composition, reproductive status, *Tabanidae* 9206.
biometrics, data analysis, graphic representation, *Apis mellifera* 7924.
biometrics, morphology, *Apis mellifera* histogata, *Apis mellifera caucasica*, France 8058.
catching methods, *Tabanus lineola*, *Tabanus nigrovittatus*, USA, Massachusetts, Cape Cod 732.
colonies, grasslands, *Myrmica sabuleti*, *Myrmica scabrinodis*, British Isles, England 8587.
coloration, environmental conditions, human impact, *Aphantopus hyperantus*, Finland 9186.
coloration, hemolymph protein composition, *Philaenus spumarius* 8945.
coloration, melanism, *Biston cognata*, USA, Pennsylvania 7579.
coloration, variability, *Aphantopus hyperantus*, Finland 2104.
comparison, isoenzymes, genes, *Tritoma infestans*, Bolivia 4692.
diapause, *Pisces*, *Apis*, British Isles 5074.
dispersal, gonotrophic cycles, survival, females, *Aedes africanus*, Uganda 1295.
dispersion, aggregation, sampling, *Heteronychus arator*, New Zealand, North Is. 1340.
eggs, ultrastructure, *Clonopsis gallica* 6634.
Empoasca flavescens, infestation, legumes 2158.
enzymes, electrophoresis, *Mansonina crassipes*, *Mansonina uniformis* 5691.
genetic variance, allometry, *Pardosa* 3927.
geographical distribution, *Aedes aegypti*, USA, Arkansas 640.
geographical variations, sexual behavior, *Drosophila silvestris*, Hawaii 9067.
habitat, *Epimeria danica*, British Isles, Lambourn R. 7013.
heterochromatin, *Gomphocerus sibiricus* 3900.
hybrids, morphology, *Scaphandrea*, USA, Colorado 7063.
hypersensitivity, man, *Apidae* venom, Australia 9266.
interspecific hybridization, *Lygus cilius*, *Lygus desertinus*, Arizona 3607.
juvenile hormones effects on morphology, reproduction, *Eurygaster integriceps* 8648.
life history, habitat, *Coptopteryx viridis*, *Coptopteryx argentina*, *Coptopteryx gayi*, Argentina, Buenos Aires 5237.
life tables, pest outbreaks, crop fields, *Scaphium officinale*, *Mogania minuta*, Okinawa 6109.
markers, coloration mutants, competition, *Pectinophora gossypiella* 8364.
mimicry, growth rate, survival, *Lepidoptera* 7611.
morphology, biogeography, *Apophanta bractea*, Spain, Catalunya 7082.

Population studies, (continued)

- mortality, survival, mathematical analysis, *Culex* 4090
 nest building (non-reproductive), vegetation, *Myrmica sabuleti*, *Myrmica scabrodis*, British Isles, England 8588
 overwintering, emergence, temperature effects, *Heliothis virescens*, USA, Arizona 1862
 overwintering, genetic drift, *Drosophila melanogaster* 3926
 parthenogenesis, *Aphis nasturtii* 3557
 pesticide resistance, *Anopheles culicifacies*, India 3131
 pesticide resistance, DDT, *Anopheles*, USSR 9436
 pesticide resistance, malaria vectors, *Anopheles*, USSR 9438
 pesticide resistance, *Nephrotettus ciniceps*, Taiwan 8504
 pesticide resistance, pirimicarb, *Aphis gossypii* 3922
 pests, biotypes, population genetics, *Nilaparvata lugens* 3604
 pests, *Culex salinarius*, USA, New Jersey Coast 6054
 phenology, adaptations, *Diatraea grandiosella* 6831
 pheromone traps, attractants, *Trypandendron lineatum* 5704
 pheromone traps, attractants, *Cidua nigricans* 3492
 pheromone traps, efficacy, *Choristoneura fumiferana* 3753
 pollution effects, air pollution, reviews, Insecta 6689
 polymorphism, pigmentation, larvae, *Choristoneura fumiferana* 5643
 population-environment relations, niche pattern, morphology, *Geocia utricularia* 3639
 predation, searching efficiency, mathematical models, Insecta 8388
 races, ecological distribution, *Apis mellifera*, Oman 5216
 range extension, *Epidemia dorcas*, Canada, Ontario 9492
 reproductive strategy, *Glossina morsitans centralis* 7614
 sampling, adults, abundance, *Agronomya rotundella* 3238
 sampling, crop fields, *Plagiognathus arbutorum*, Sweden 3807
 sampling methodology, parasites, *Ooencyrtus kuvanae* 2821
 sampling, pheromone traps, *Scotinus multistratus* 2228
 seasonal variations, developmental stages, interspecific relationships, *Popillia japonica*, USA, North Carolina 600
 seasonal variations, mortality, population-environment relations, *Heteronychus arator*, New Zealand, North Is. 1301
 seasonal variations, parasitism, sex differences, *Amblyomma americanum* 3586
 seasonal variations, temperature effects, mathematical models, *Heteronychus arator*, New Zealand, North Is. 1302
 sex pheromone chemical composition, variability, *Argyrotaenia velutinana* 1772
 sigma-virus infection, *Drosophila* 3393
 site selection, pupation, environmental factors, *Drosophila nigrospiracula*
Drosophila mettleri 8375
 subdivision, population genetics, fecundity, fitness, *Tribolium castaneum* 3603
 surveys, geographical distribution, *Odonata*, Czechoslovakia, Muran Highlands 2357
 swarming, mating behavior, *Culicoides variipennis*, USA, Virginia 5106
 swarms, body weight estimation, workers, *Apis mellifera* 8027
 traps, methodology, *Chrysomya bezziana* 861
 vertical distribution, altitudes, enzymes, polymorphism, coloration, *Elaphrus americanus*, North America, Pacific Northwest 9217
Population-environment relations
 cold tolerance, geographical variations, divergence, *Eurosta solidaginis* 2603
 forest, *Heteroptera*, Czechoslovakia 2139
 geomorphology, effects on species diversity, peninsular effect, *Carabidae*, Canada, Manitoba 5125
 guilds, leafminers, population density, species diversity, Insecta 3632
 habitat, phenology, bionomics, *Culex inornatus*, USA, California 9221
 morphology, niche pattern, *Geocia utricularia* 3629
 pests, primary production, *Fragaria vesca*, *Trialeurodes* 2060
 population density, environmental factors, pupae, spatial distribution, *Rhagoletis indifferens* 586
 seasonal variations, mortality, population dynamics, *Heteronychus arator*, New Zealand, North Is. 1301
Populations
 developmental stages, susceptibility, infection, parasites, *Romanomermis culicivora*, *Culex pipiens* 1438
 hybrids, sex variants, *Chorthippus mollis* 2755
 mathematical models, sexual behavior, *Chauliognathus pennsylvanicus* 1148
 monitoring, pheromone traps, *Conopia myopaeformis*, Italy 2889
 predation, integrated control, *Pectinophora gossypiella* 3021
 overwintering, pest control, soil fumigation, *Leptinotarsa decemlineata* 2263
 suppression, pest control, control programs, *Cochliomyia hominivorax* 8560
Populus
 food plants, food preferences, *Chrysomela scripta* 8305
 silviculture, pests, damage, defoliation, Insecta 5349
Populus angustifolia
 host plants, chemical properties, phenols, host selection, *Pemphigus betae* 8345
Porcellio scaber
 hepatopancreas, diets effects on ultrastructure 6589
Poria rari
 decay fungi, effects on softwoods, food preferences, *Coptotermes acinaciformis* 1196
Porphyrophora
 ultrastructure, glands, waxes, integument, cytology 243
Porrbomma pygmaeum
 occurrence, Sweden 4717
Porrbomma antipodiana
 predatory behavior, food consumption, *Helix aspersa* 9121
Portanous bilineatus
 new species, taxonomy, morphology, South America 5588
Portanous caudatus
 new species, taxonomy, morphology, South America 5588
Portanous spinosus
 new species, taxonomy, morphology, South America 5588
Porthetria monacha
 baits, attractancy, disparture, analogs 6930
Portia flimbriata
 mating behavior, courtship, webs, Australia, Queensland 4287
 predatory behavior, webs, Australia, Queensland 4343
 visual discrimination, display, distance, conspecifics 5668
Portugal
 new species, taxonomy, morphology, *Caecilius ambulans*, *Mesopocus lusitanus* 8003
 new species, taxonomy, morphology, *Coxia* 5576
 taxonomy, systematics, Tineidae, Symmoca, Pterophoridae 2466
Portugal, Vila do Conde
 water quality, indicator species, *Hydropsyche lobata* 3053
Portulaca oleraceae
 host plants, life history, *Hypurus bertrandi* 6728
Potision effects
 variegation, relationship chromosomes structure, heat shock puffing, *Drosophila melanogaster* 7840
Poolelectrotermes nayari
 neurosecretory cells, cytology, castes 8914
Posture
 leg, muscles, resting tension, *Periplaneta americana* 7286
 reflex tonus, motor neurons, role, peripheral nervous system, *Periplaneta americana* 8918
 thermoregulatory behavior, environmental factors, *Pentatomidae* 7503
Potamia flava
 benthos, colonization, *Hydropsyche*, USA, Mississippi R. 6226
Potassium
 active transport, digestive tract, *Hyalophora cecropia* 2544
 active transport, midgut, thallium inhibition, *Hyalophora cecropia* 8074
 channels, giant axons, palytoxin effects on, *Periplaneta americana* 8176
 effects on enzymatic activity, carbonate dehydratase, *Hyalophora cecropia* 201
 flight muscle, electrochemistry, mutation, *Drosophila* 5660
 hemolymph, sex differences, *Schistocerca gregaria* 6371
 ion exchange, distribution, digestive tract, *Acrididae* 239
 transport, midgut, larvae, reviews, *Lepidoptera* 8081
Potassium currents
 membrane potential, muscles, *Carassius morosus* 8904
Potassium iodide
 ingestion, effects on growth, egg production, *Bombyx mori* 6649
Potato leaf roll virus
 disease transmission, efficiency, *Myzus persicae*, *Macrosiphum euphorbiae* 3395
 disease transmission, insecticides effects on, *Aphididae* 3042
 infection, food plants, effects on longevity, fecundity, *Leptinotarsa decemlineata* 7440
 pest control, barriers, *Aphididae* 684
Potato spindle tuber viroid
 disease transmission, *Aulacorthum solani*, *Macrosiphum euphorbiae*, *Myzus persicae* 3704
Potato virus Y
 diets, adsorption, helper factor effects on, *Myzus persicae* 3416
 disease transmission, *Myzus persicae* 7654
 transmission, feeding behavior, temperature effects on, *Myzus persicae*, *Macrosiphum euphorbiae* 7699
Poultry
 ectoparasites, chemical control applications, fate, *Ornithonyssus sylvarum* 1387
 ectoparasites, chemical control, food additives, *Ornithonyssus sylvarum* 1397
 farms, pest control, attractants, efficiency, *Diptera* 4639
 infestation, identification, *Ornithonyssus bursa*, Philippines 2925
 pests, chemical control, *Ornithonyssus sylvarum* 1452
Pourouma cecropifolia
 flowering phenology, pollination, *Apidae*, Brazil 4412
Power lines
 environmental impact, community composition, chaparral, *Arthropoda*, USA, Arizona 9183
Power plants
 environmental impact, flushing, abundance, Insecta, USA, Nebraska, Niobrara R. 8611
Poxvirus
 disease transmission, vectors, *Culex nigripalpus*, *Wyeomyia vanduzeei* 3697
Prairies
 chemical control, sulfur dioxide, population density, *Melanoplus sanguinipes* 2590
 crop protection, predictions, feeding, *Acrididae*, USA, Montana 4634
 detritus productivity, soil microorganisms, *Arthropoda*, USA, Wisconsin 2287
 flowers, foraging behavior, *Hymenoptera*, USA, Wyoming 3564
Prays citri
 pest control, pheromone traps, population dynamics, Israel 4594
 pheromone traps, sex pheromone, methodology, Israel 862
Prays oleae
 population levels, pheromone traps, correlation, infestation, Spain, Granada 9281
Precipitin test
 prey identification, pests, *Lepidoptera* 1690
Precis archesia
 larvae, chromosome number 2322
Precis coenia
 migrations, weather, synoptic-scale wind systems, USA, Florida 5978
Precis orythia
 larvae, chromosome number 2322
Precocene
 analogs, antifeedants, larvae, *Rhodnius prolixus* 8963
 effect on progeny sterility, *Glossina morsitans morsitans* 2698
 effects on development, cases differentiation, *Prothionomus simplex* 6647
 effects on development, *Cimex lectularius* 374
 effects on juvenile hormones biosynthesis, *Diptera punctata* 1771
Precocene I
 effects on larvae development, toxicity, *Locusta migratoria* 1049
Precocene II
 effects of molting, metamorphosis, larvae, *Rhodnius prolixus* 364
 effects on corpora allata activity, feeding, *Dysdercus cingulatus* 9052
 effects on, embryogenesis, *Oncopeltus fasciatus* 2703
 effects on larval development, toxicity, *Locusta migratoria* 1049
 effects on ovary development, oogenesis, *Oxya japonica* 1115
 effects on reproductive organs, morphogenesis, *Coryca cephalonica* 7425
 growth regulators, sensitivity, development, ovary, *Pyrrhocoris opterus* 8225
 topical application, effects on attractancy, pest control, *Ceratitis capitata* 8799
Precocoenes
 effects on *Ageratum houstonianum* inhibition synthesis, *Ageratum houstonianum* 3342
Precursors
 pheromones, effects on biosynthesis, *Ips parconfusus* 1784
Predation
 abundance, *Haematobia irritans*, *Philonthus* 3606
 Acari, Nematoda, fungi, decomposition, leaf litter 2133
 activity patterns, life cycle, *Coniopteryx esbenpeterseni* 6847
 adults, biology, *Microdon fuscipennis* 2778
 anti-predator behavior, defensive behavior, *Myrmecoleon*, *Formicidae* 6836

Predation, (continued)

- avoidance behavior, environmental conditions, *Odonata* 1289.
beehives, apiculture, *Ursus americanus*, *Apis mellifera*, USA, North Carolina 5379.
biological control, larvae, *Mesocyclops leuckarti* pilosa, *Aedes aegypti*, *Aedes polynesiensis* 4503.
biological control, parasites, *Scarabaeidae*, *Taenia saginata*, Kenya 1317.
biological control, pests, *Panonychus ulmi*, *Tetranychus urticae*, *Coniophyes ebneri* Italy 2813.
biological control, pests, *Sericothrips variabilis*, *Orius insidiosus* 2138.
biological control, population dynamics, *Acyrtosiphon pisum* 2866.
biological control, population regulation, *Pseudococcus*, *Saissetia oleae*, *Cryptolaemus montrouzieri* 3611.
biological control, *Solenopsis invicta*, *Anthonomus grandis* 2200.
Cametaria, population regulation, host plants, *Quercus nigra* 2134.
Chaoborus trivittatus, larvae, feeding behavior, zooplankton, *Daphnia pulex* 2001.
cleptoparasitism, feeding behavior, *Argyrodites* 1996.
colonies, *Iridomyrmex purpureus*, *Oryzias latipes* 5244.
control, mimicry, *Papua* major, *Lygaeus equestris* 9214.
conspecifics, cannibalism, *Philotus basilius* 6740.
Crematogaster laeviuscula, *Polistes eximius*, mortality, population dynamics 2155.
damage, hives, apiculture, *Ursus americanus*, *Apis mellifera* 3040.
diets, lakes, *Polycelis nigra*, *Insecta* 1487.
effects on abundance, *Passer montanus*, *Leucocoma calada* 1292.
effects on food organisms coloration, *Acar*, *Pisces* 6228.
effects on mortality, parasites, *Blaesoxipha*, *Melanophis sanguineus* 6027.
effects on population changes, seasonal variations, coastal environment, *Diptera* 8602.
effects on population decline, eggs, *Pala rosea* 8385.
effects on population density, *Aves*, *Choristoneura occidentalis* 6026.
effects on population density, *Toxotrichus brevipalpis*, *Aedes aegypti* 7568.
effects on population levels, pests, *Agelanus phoeniceus*, *Ostrinia nubilalis*, Canada, Quebec, *Bethanotus* 5262.
effects on seeds, *Rumex crispus*, *Rumex obtusifolius*, *Gastrophysa viridula* 6784.
effects on vertical distribution, abundance, *Acilius semisulcatus*, *Daphnia pulex* 5438.
effects on wings morphology, mimicry, *Lycaenidae* 2786.
effects on, zooplankton, species composition, *Chaoborus americanus*, USA, Michigan 583.
eggs, crop fields, *Heliothis virescens*, USA, Texas 6124.
eggs, development, *Epicauta atrata*, *Epicauta pennsylvanica* 6839.
eggs, oviposition, host plants, *Pectinophora gossypiella*, *Gossypium* 6157.
eggs, *Solenopsis invicta*, *Air spuma* 6839.
feeding behavior, *Conditura varipes*, *Culicoides variipennis*, USA, Virginia 6041.
feeding behavior efficiency, food organisms, *Macroleon quinquevittatus*, *phideole* 2804.
feeding behavior, food organisms, *Limnodynastes*, *Nilaparvata lugens* 8618.
feeding behavior, food sources population density effects on, *Phytoseiulus persimilis*, *Amblyseius degenerans* 1205.
feeding behavior, resource partitioning, *Notonecta*, British Isles 2904.
feeding behavior, *Serratrumba serrata* 1211.
feeding immunity, *Apis bradfieldi*, *Apis mellifera* 9192.
feeding, pupae, *Dentrocop pubescens*, *Hyalophora cecropia* 7592.
food consumption, *Coccinellidae*, *Acyrtosiphon pisum* 2875.
food organisms, *Aves*, *Picopetor* USA, Michigan 6820.
food organisms, *Muscicapa striata*, *Inachus* 10 6823.
food organisms, *Nabis alternatus*, *Phyllotreta cruciferae* 8368.
food organisms, *Orthetrum austeri*, *Lepidoptera* 4437.
food organisms survival, body size effects on, *Olios*, *Eleutherodactylus coqui* 1293.
food preferences, *Dendroctonus frontalis*, *Corticaria* *galer*, *Corticaria parallelus* 2797.
foraging behavior, energetics, habitat variation, *Argiope trifasciata*, *Araeus trifolium* 8297.
foraging behavior, larvae, *Coccinella trifasciata*, *Coccinella californica*, *Coccinella undecimpunctata*, *Cycloneda polita* 2869.
foraging behavior, *Megaponera foetens*, *Macrotermes* 2109.
foraging behavior, prey population density, *Coccinellidae* 6739.
Gracillariidae, survival, isolation, plant hosts, *Quercus* 2135.
growth, development, fecundity, mathematical models, *Adalia bipunctata* 6018.
host plants effects on, food organisms biomass, *Misumena vatia* 457.
immature stages, *Chironomidae*, food organisms, fry, *Oncorhynchus kisutch* 2131.
intraspecific relationships, larvae, *Epicauta atrata*, eggs, *Epicauta pensifera*, *Epicauta vittata*, *Epicauta immutata*, *Epicauta occidentalis* 9125.
larvae, eggs, *Ambystoma maculatum*, ponds, *Chironomidae*, Canada, Quebec 1203.
life history, oviposition, fecundity, *Toxotrichus splendens* 1188.
mimicry, bioluminescence, interspecific relationships, *Phorus* 1303.
mortality, developmental stages, *Gastrophysa polygona*, British Isles 8396.
mortality, larvae, *Spilactis imparilis*, Japan 2165.
natural enemies, effects on population levels, *Stibion* avenue, *Metopopulum* *diribundum*, *Metopopulum* *luteum*, British Isles 8389.
natural enemies, sex ratio, population dynamics, *Insecta* 8386.
Nematoda, Tydeidae, leaf litter, decomposition, deserts 2132.
nesting behavior, *Pompilidae*, USA, Florida 1948.
new records, intertidal environment, Nematoda, *Staphylinus ater*, British Isles, Scotland, *Ythan Estuary* 8362.
new records, *Sciurus carolinensis*, pupae, *Anthera polyphemus*, *Attacus atlas*, USA, Wisconsin 5265.
Ocellaria schellenbergii, nuclear polyhedrosis virus transmission, larvae, *Heliothis punctiger* 1029.
oviposition, evolution, *Ammophila aberti* 2021.
oviposition, population dynamics, *Aphelinus thomsoni*, *Drepanosiphum platanoidis* 2887.
pest control, insectivores, mosquito larvae, *Aphanius dispar*, Saudi Arabia 563.
pest control, *Pan*, *Insecta*, Turkey 619.
pest control, *Psylla pyricola*, *Aves* 9334.
pests, *Phytoseiulus macropilis*, *Phytoseiulus persimilis*, *Tetranychus urticae* 2205.
pits construction, light intensity, soil moisture, larvae, *Myrmecoleon unmaculatus* 5126.
population density, breeding success, *Magicicada septendecim* 5983.
population density, larvae, *Oreophera brunata*, British Isles, Mainland 565.
population regulation, *Hipparchia parisatis*, Oman 5215.
population studies, searching efficiency, mathematical models, *Insecta* 8388.
predator-prey interactions, prey population density, cannibalism, *Paratenodera*

Predation, (continued)

- angustipennis* 3642.
predator-prey interactions, *Solenopsis invicta*, *Chalcodermes aeneus* 591.
prey species composition, webs, *Dicyna*, Egypt, Arab Rep. 480.
seeds, forests, *Phedole*, Costa Rica 7604.
seeds, geographical variations, *Stator generalis*, *Enterolobium cyclocarpum*, Central America 5973.
sexual reproduction, evolution, natural selection, males, *Insecta* 4698.
simulation models, *Myzus persicae* 1234.
temperature, *Celhenius fasciata* 6690.
temperature effects on, eggs, *Solenopsis invicta*, *Heliothis virescens* 9127.
Tenodera aridifolia *unensis*, *Cricetidae* 2803.
webs, guilds, habitat preferences, *Araneae* 1959.
Predator-prey interactions, abundance, *Philotus*, *Haematobia irritans* 3606.
abundance, population dynamics, seasonal variations, *Cinara*, *Essigella pini*, *Pinus taeda*, USA, South Carolina 594.
activity patterns, *Insecta*, *Parulidae* 4421.
anti-predator behavior, *Syrphidae*, *Schizolachnus pini* 8293.
avoidance behavior, locomotor activity, *Halobates robustus* 3651.
biological control, *Tetranychus urticae*, *Phytoseiulus persimilis*, *Amblyseius* *potentillae*, *Amblyseius* *bibens*, *Metaseiulus occidentalis* 8709.
capture, efficiency, light effects, dark, *Chaoborus punctipennis*, *Copepoda* 489.
dispersal, *Amblyseius fallax*, *Panonychus ulmi*, *Tetranychus urticae*, *Aculus schlechtendali* 560.
effects on colonization, host plants, *Myzus persicae* 533.
effects on population levels, dispersal, *Carabidae*, *Myzus persicae*, British Isles 8391.
eggs, larvae, *Insecta*, *Pseudophisus* *incubans* 587.
exploratory behavior, host selection, parasitoids, *Anisopteromalus calandreae*, *Callosobruchus maculatus* 4367.
fecundity, development, oviposition, *Galerandrom longipilis*, *Neoseiulus fallax*, *Phytoseiulus macropilis*, *Proprioseiopsis tangeris*, *Tetranychus urticae* 362.
feeding behavior, egg production, temperature effects, *Coccinella californica*, *Coccinella trifasciata*, *Acyrtosiphon pisum* 2878.
feeding behavior, *Nabis amoenifera*, *Spodoptera erugla*, *Lygus hesperus* 5927.
feeding, zooplankton, *Chaoborus*, mathematical models 4655.
food consumption, *Coccinellidae*, *Acyrtosiphon pisum* 2875.
food sources population density effects on feeding behavior, *Phytoseiulus persimilis*, *Amblyseius degenerans* 1206.
foraging behavior, *Coccinellidae* 6739.
foraging behavior, food selection, *Phytoseiulus phytoseius*, *Pogonomyrmex* *californicus*, *Pogonomyrmex* *rugosus*, USA, Nevada 2145.
foraging behavior, hunger, abundance, *Coccinella californica*, *Acyrtosiphon pisum* 2872.
foraging behavior, larvae, *Chrysopa carnea*, *Hippodamia convergens* 2870.
growth rate, *Myzus persicae*, *Geocoris bullatus*, *Nabis alternatus* 2071.
Hemiptera, *Lepidoptera* 7586.
new records, geographical distribution, *Coccinella* *billen*, *Oenopis*, *Paederus* *luteus*, *Paederus* *melampus*, *Nilaparvata lugens*, India 3565.
orchards, spatial distribution, population dynamics, predators, *Psylla pyri*, *Panonychus ulmi* 6211.
pests, biological control, predation, *Orius insidiosus*, *Sericothrips variabilis* 2138.
pests, natural enemies, population dynamics, *Insecta*, conferences 8672.
pests, precipitin test, *Epiloptera* 1690.
pheromones, synergism, biochemical analysis, chemotaxis, *Thanasimus formicarius*, *Ips typographus*, *Thanasimus formicarius* 422.
population density, effects on survival, fecundity, dispersal, *Phytoseiulus persimilis*, *Amblyseius degenerans* 4468.
population density, population dynamics, environmental effects, *Coccinellidae*, *Acyrtosiphon pisum* 2886.
population density, predators, effects on food consumption, predatory behavior, *Phytoseiulus persimilis*, *Amblyseius degenerans* 4466.
population density, temperature effects on, *Coleomegilla maculata*, *Myzus persicae* 6022.
population dynamics, age composition, mathematical models, *Acarina* 7596.
population dynamics, biological control, *Acyrtosiphon pisum* 2866.
population dynamics, mathematical models, *Albion coraria*, *Stelidota geminata* 9204.
population dynamics, movements, *Coccinella californica*, *Coccinella trifasciata*, *Acyrtosiphon pisum* 2877.
population dynamics, *Phytoseiulus persimilis*, *Tetranychus urticae* 2882.
population levels, *Orius insidiosus*, *Sericothrips variabilis* 1253.
predation, searching efficiency, population studies, mathematical models, *Insecta* 8388.
predators, sexual reproduction, life cycle, *Coccinellidae*, *Acyrtosiphon pisum* 2871.
predators stability, prey population density, *Notonecta hoffmanni* 3646.
predatory behavior, anti-predatory behavior, *Orius insidiosus*, *Sericothrips variabilis* 3613.
predatory behavior, cannibalism, prey abundance, *Adalia bipunctata*, *Eucalipterus* *ultrae* 8298.
predatory behavior, *Serratrumba serrata*, *Folsomia candida* 1199.
prey kairomones effects on predatory behavior, *Amblyseius fallax*, *Phytoseiulus macropilis* 2156.
prey population density, cannibalism, *Paratenodera angustipennis* 3642.
prey population density, cannibalism, *Araneidae*, *Uloboridae* 9117.
spatial distribution, prey, predatory behavior, *Phytoseiulus persimilis*, *Amblyseius degenerans* 4356.
Predators, abundance, community composition, *Glycine max* crop fields, *Arthropoda* 2164.
abundance, crop fields, *Trifolium alexandrinum*, *Insecta*, Egypt 6876.
abundance, domestic animals excretory products, *Arthropoda*, Uganda 2896.
abundance, nectar effects on, *Solenopsis invicta*, *Gossypium* 5971.
abundance, seasonal variations, crop fields, *Gossypium*, Egypt 6971.
Aphididae, nontarget organisms, pesticides toxicity, *Aphidoletes aphidimyza* 8173.
Aphididae, phenology, *Chrysopidae*, *Coccinellidae*, *Syrphidae*, British Isles, England 8392.
Aphididae prey, *Coleoptera*, *Diptera*, India 4417.
attractants, carboxyphenyl, males, *Collops vittatus* 418.
avoidance behavior, defensive behavior, *Araneidae*, *Uloboridae* 9117.
avoidance behavior, sections, *Notophthalmus viridescens*, *Dytiscus verticalis* 3863.
bibliographies, *Aphidoletes aphidimyza* 7927.

Predators, (continued)

- biological control, Coccinellidae, *Tetraneura destructor*, New Hebrides 4576
 biological control, eggs, Diabrotica, *Solenopsis geminata*, pheidole, Costa Rica 2983
 biological control, pest control, Carabidae, Diabrotica 6086
 biological control, pest control, Coccinellidae, *Rhopalosiphum maidis*, Zea mays 5295
 biological control, pest control, Formicidae, *Laphygma exigua* 5368
 biological control, pest control, Phytoseiulus persimilis, Tetranychus urticae, British Isles 3023
 biological control, vectors, disease transmission, Toxorynchites, Culex 2861
 biology, *Ceolophora quadrivittata*, Coccus vinidis, New Caledonia 2774
 bionomics, life cycle, Diadiplosis concis, *Sussetta hemiphaera* 9094
 blueberry shoestring virus vectors, nontarget organisms, insecticides effects on, Illinois pepper 8458
 check lists, *Hypera posica*, USA 3736
 chemical control, insecticides, Coccinellidae, *Leis axysindis*, *Propylaea japonica* 1417
 chemical stimuli effects on polymorphism, *Chaoborus americanus*, *Daphnia pulex* 572
 collection, storage, survival, *Jalysus spinosus* 730
 companionship, development, sexual reproduction, longevity, *Cybocephalus mearnsi*, *Cybocephalus nigripes*, *nigripes* 7505
 control programs, *Stethorus picipes*, *Tetranychus urticae* 3776
 crop field, *Trichoplusia ni*, *Labidura riparia* 2223
 defensive behavior, maternal behavior, *Gargaphia solani* 3563
 defensive behavior, vocalization, *Cyma tenora*, *Chiroptera* 5914
 development, bionomics, longevity, *Leptothrips mali* 8219
 diapause induction, photoperiods, diets, carotenoids, Acari 4257
 diets, nests, *Bembix* 6033
 education, auditory perception, acoustic responses evolution, *Chiroptera*, Lepidoptera 5158
 echolocation, auditory perception, tympanum, acoustic responses, *Chiroptera*, Lepidoptera 4975
 ecological distribution, *Scymnoides lividigaster*, *Leptothrips galbula*, Australia 2814
 effects on abundance, ecological distribution, urban environments, *Hyalophora ecriopsis*, USA, Illinois 7597
 effects on biological control, Chermes clematidis, *Phytoseiulus persimilis* 1265
 effects on community composition, forests, Arthropoda, *Myrmotherula fulviventer* 4467
 effects on growth rate, *Myzus persicae* 2071
 effects on host plants chemical composition, *Agromyza frontella*, *Medicago sativa* 552
 effects on larvae mortality, *Dacus oleae* 7607
 effects on mortality, pupae, *Choristoneura occidentalis* 6083
 effects on pests abundance, crop fields, *Brevicorya brassicae* 6908
 effects on population dynamics, life history, demography, *Hyala regilla*, *Drosophila melanogaster* 7065
 effects on population levels, pupae, sampling, *Choristoneura fumiferana* 5996
 effects on population levels, *Rhinocyllus conicus* 5993
 efficiency, pests, environmental factors, orchards, *Malus*, *Panonychus ulmi* 8398
 eggs, *Dicordiplosis manihoti*, *Phenacoccus manihoti*, Africa 1624
 eggs, mortality, *Empoasca fabae* 6046
 escape behavior, neurons anatomy, ear, *Agrotis segetum* 5662
 feeding behavior, biological control, Culiidae, *Gambusia affinis* 617
 feeding behavior, food preferences, *Maripissa ugrina*, Insecta 1208
 feeding behavior, insecta, prey, *Rhinocyllus conicus*, larvae, USA, Virginia 1200
 feeding, life cycle, Aphididae, *Yugoslavia* 3552
 food chains acute toxicity, accephate, *Phytoseiulus persimilis*, *Tetranychus urticae* 309
 food consumption, energy intake, foraging behavior, *Macroleone quinquemaculatus* 7296
 food preferences, Arthropoda 1197
 food preferences, prey, *Stictia carolina* 5165
 foraging behavior, predator-prey interactions, larvae, *Chrysopa carnea*, Hippodamia convergens 2870
 geographical distribution, range extension, *Aleuropteryx juniperi*, *Carulaspis juniperi*, USA 3944
 habitat, nesting behavior, feeding, *Osmia maritima* 6851
 Heliothis, nontarget organisms, insecticides toxicity 8172
 host plants effects on, biological control, *Myzus persicae* 723
 identification, electrophoresis, serological tests, *Eldana saccharina* 2110
 insecticides effects on, pest control, *Nilaparvata lugens* 6162
 integrated control, pests, pesticides, mathematical models 8465
 larvae, *Cosmopterix*, *Silba*, synchronization, reproductive strategy, *Hybanthus prunifolius*, Panama 2080
 larvae mortality, *Synanthedon salmaceus*, New Zealand 4415
 life history, *Andrallus spinidens*, Malaysia 4332
 life history, morphology, *Hemileuca coperi* 7508
 life history, pests, *Symmetrischema capsica* 6720
 life history, *Pseudococcus longispinus*, New Zealand 459
 life history, weed control, biological control, *Carduus*, *Ceutorhynchus rufus*, *Trichosiroxalis horridus* 1979
 mass rearing methodology, biological control, *Anthonomus nemorum* 2259
 microorganisms association, *Metatseius occidentalis* 8170
 morphology, Coccinellidae, *Exochomus flaviventris*, *Exochomus concavus*, *Huperaspis senegalensis*, Congo, People's Rep. 4104
 mortality, developmental stages, *Musca vetustissima*, Arthropoda, Australia 2880
 natural enemies, biological control, *Pseudococcus comstocki*, USA, California 3018
 natural enemies, Fulgoroidea 9137
 natural enemies, *Neochetia bruchi*, *Neochetia eichhorniae*, Argentina 8379
 natural enemies, pests, crops, *Beta vulgaris*, *Aulacothorus solani*, *Myzus persicae*, New Zealand 8492
 natural enemies, seasonal variations, *Pseudaulacaspis pentagona*, Japan 2141
 nest building, collection, storage, prey, *Hypera*, *Odynerus dieckus* 7524
 new records, pests, *Spodoptera litura*, Araneae, India, Andhra Pradesh 1439
 new species, morphology, *Sukumakihia popei*, India 3180
 nontarget organisms, toxicity, chloridifomform, *Geocoris*, *Hippodamia convergens*, Nabis, *Chrysopa carnea* 4227
 nontarget organisms, toxicity, insecticides, *Phorodon humuli*, *Aphis fabae* 9028
 nuclear polyhedrosis virus transmission, *Podisus maculiventris*, pest control, *Trichoplusia ni* 3811
 parasites, Aphididae, India 4416
 parasites, host preferences, *Heliothis*, Colombia 555.

Predators, (continued)

- parasites, *Saussia hemiphaera*, Cuba 9010
 pest control, biological control, greenhouses, *Anthonomus nemorum*, *Trialeurodes vaporariorum* 7708
 pest control, biological control, pesticides effects on, *Phytoseiulus persimilis*, *Tetranychus urticae* 3766
 pest control, biological control, *Solenopsis invicta*, *Nezara viridula* 3790
 pest control, Carabidae, *Staphylinidae*, *Dela brassicae* 2210
 pest control, crop fields, *Anticarsia gemmatilis*, *Glycine max* 6148
 pest control, Eriophyidae, leaf-curl association, India, West Bengal 9299
 pest control, forests, Aves, *Oerophthera brumata*, *Tortrix viridana* 3037
 pest control, habitat effects on dispersal, *Pardosa* 4427
 pest control, *Hemipteroseius indicus*, *Dysdercus koesigii* 2972
 pest control, Insecta, *Megadema lytta*, *lytta*, India 5214
 pest control, *Musca domestica*, *Acridotheres gangianus*, India 7681
 pest control, pesticide resistance selection, *Amblyseius fallacis* 5794
 pest control, *Phytoseiulus macropilis*, *Phytoseiulus persimilis*, *Tetranychus urticae* 2205
 pest control, stored products, *Ephesia caulella*, *Blattisocius tarsalis* 2955
 pesticides, effects on food consumption, oviposition, *Amblyseius fallacis* 5311
 pesticides, toxicity tests, effects on nontarget organisms, *Amblyseius fallacis* 5046
 pests biological control, *Hypera posica*, *Sitona hispidula* 612
 pests, biological control, *Parabemisia myricae*, USA, California 1435
 pests, *Myzus persicae*, *Spodoptera litura*, India 6926
 plants antifeedants, chemical composition, *Leptinotarsa decemlineata* 521
 population decline, effects on species composition, benthos, streams, *Salvelinus fontinalis*, Insecta 8613
 population density, crop fields, *Glycine max*, Arthropoda, USA, Virginia 6190
 population density, effects on food consumption, predatory behavior, *Phytoseiulus persimilis*, *Amblyseius degenerans* 4466
 population density, effects on survival, fecundity, dispersal, *Phytoseiulus persimilis*, *Amblyseius degenerans* 4468
 population density, spatial distribution, *Tetranychus urticae*, *Phytoseiulus persimilis* 3625
 population dynamics, Carabidae, British Isles, England 8387
 population regulation, pests, *Aphis craccivora*, *Vigna sinensis* 9188
 population regulation, ponds, *Chaoborus*, *Cladocera* 8616
 population regulation, population dynamics, *Cydia pychora* 8381
 predation, predator-prey interactions, feeding behavior, eggs, larvae, Insecta, *Pseudoplusia includens* 587
 prey activity patterns, Insecta, *Parulidae* 4421
 prey identification, precipitin test, Lepidoptera 1690
 pupation, *Dytiscus verticalis* 5155
 sampling methodology, crop fields, Insecta, *Glycine max* 6145
 seeds, detoxification, excretion, nitrogen, feces, *Caryodes brasiliensis* 3436
 seeds, life history, destruction, population density, *Cirsium canescens*, *Paracantha culta*, *Orellia occidentalis*, *Homoeosoma stypticum* 9105
 seeds, life history, *Paracantha culta*, *Orellia occidentalis*, *Homoeosoma stypticum* 5884
 sexual reproduction, life cycle, predator-prey interactions, Coccinellidae, *Acynthosiphon pisum* 2871
 soil fauna, trophic relations, sampling methodology 6860
 spatial distribution, population dynamics, orchards, predator-prey interactions, *Psylla pyri*, *Panonychus ulmi* 6211
 species composition, larvae, *Diaprepes abbreviatus* 4433
 species composition, weeds, Coccinellidae, *Chrysopa* 6852
 stability, predator-prey interactions, prey population density, *Notonecta hoffmanni* 3646
 surveys, Insecta, Araneida, *Nezara viridula* 607
 surveys, larvae, *Heliothis virescens* 2108
 Toxorynchites rufus rufus, biological control, *Aedes aegypti*, *Culex quinquefasciatus* 4579
 use, pest control, *Peuceia viridans* 9122
 vectors, blueberry shoestring virus, insecticides, Illinois pepper 4630.
Predatory aggression,
 predatory behavior, vision, literature reviews, *Salticidae* 3569.
Predatory behavior,
 attack, capture, *Serrastroma serrula* 6741
 cannibalism, prey abundance, predator-prey interactions, *Adalia bipunctata*, *Eucallipterus tiliae* 8298
 circadian rhythms, *Sphecidae* 9128
 colonies, population levels, emergence, effects on, *Polistes chinensis antennalis* 2788
 evolution, oviposition, *Amphipoda aberti* 2021
 excretory products effects on, *Euthyrhynchus floridanus*, *Pentatomidae* 2898
 food consumption, *Helix aspersa*, *Porthothelae antipodiana* 9121
 food consumption, population density, predators, *Phytoseiulus persimilis*, *Amblyseius degenerans* 4466
 food organisms, *Neotamias vittatus* 8250
 food organisms, *Serrastroma serrula*, *Folsomia candida* 7533
 food preferences, Lepidoptera, *Argiope brunneifrons* 5171
 food selection, prey, *Agonum dorsale* 8299
 food selection, prey, *Pardosa vancouveri* 4349
 foraging behavior, larvae, *Coccinella trifasciata*, *Coccinella californica*, *Coccinella undecimpunctata*, *Cycloneda polita* 2869
 humidity, chemical stimuli, prey capture, *Notiophilus biguttatus* 4359
 locomotion efficiency, *Notonecta* 6231
 nest provisioning, nesting behavior, *Alysson conicus* 5854
Phytoseiulus macropilis effects on, *Amblyseius fallacis*, *Phytoseiulus macropilis* 2156
 population density, spatial distribution, prey, *Phytoseiulus persimilis*, *Amblyseius degenerans* 4350
 predator-prey interactions, *Orius insidiosus*, *Sericothrips variabilis* 3613
 predator-prey interactions, *Serrastroma serrula*, *Folsomia candida* 7533
 predator-prey interactions, spatial distribution, prey, *Phytoseiulus persimilis*, *Amblyseius degenerans* 4356
 predatory aggression, vision, literature reviews, *Salticidae* 3569
 types, ecological distribution, feeding adaptations, Carabidae, Italy 4446
 visual stimuli, mechanical stimuli, moulting, *Ranatra linearis* 8295
 webs, food preferences, *Mastophora dirzydeani* 1949
 webs, *Portia fimbriata*, Australia, Queensland 4343
 webs, structure, function, aquatic environment, *Wendigarda* 1967.
Prediction,
 infestation, paddy fields damage, *Tyrrporyza incertulus* 3001
 pests infestation prediction, *Vicia faba*, *Aphis fabae* 2969

Subject Index

- Predictions,**
crop protection, damage, feeding, Acrididae, USA, Montana 4634.
infestation, Chorisoteneura pinus, Pinus banksiana, USA, Wisconsin 603.
pests, temperature effects on flight activity, Ostrinia nubilalis, USA, Ohio 5124.
population levels, eggs, trapping, females, Delia coarctata 1290.
- References,**
attachment sites, parasites, Leptus 8321.
carriers, phoretic behavior, genetic variation, Pectolochirus necrophori 8663.
host plants, Eriosema, Ribis, Ulmus 8356.
nesting, swarms, Apis mellifera 8594.
- Preloence,**
effects on oogenesis, progeny, Glossina moritans moritans 5093
- Prenelepis imparis,**
abundance, nectar effects on, Gossypium 5971.
- Prenelepis melanogaster,**
geographical distribution, check lists, Korea 3146.
- Preservation,**
methodology, Insecta 4073.
methodology, Insecta 8865.
pinning, methodology, needles, Lepidoptera 6470.
sampling, methodology, Chalcidoidea 4096.
- Preservatives,**
wood, effects on colonies, apiculture, Apis mellifera 3019.
- Pressure effects,**
mechanoreceptors response, Periplaneta americana 145.
- Proctonia lethica,**
food plants, Doryphora punctatissima 1982.
- Prey,**
abundance, predatory behavior, predator-prey interactions, Adalia bipunctata.
Eucallipterus tiliae 8298.
activity patterns, Insecta, Panulidae 4421.
Aphididae, predators, Coleoptera, Diptera, India 4417.
attractancy, web, structure, design, Phorocnidia studo 2790.
attraction, burrowing behavior, Cicindela willistoni, USA, Arizona, Sulphur
Springs Valley 5888.
capture, humidity, chemical stimuli, predatory behavior, Notiophilus biguttatus
4359.
Ctenocheilus bicolor, Ctenocheilus distinctus, Priocnemis erythrothorax.
Agenioideus nigricornis, Batzoniellus tricolor, Telostegus nicotianaeusens.
Pompilus cinereus, Turneromyia melanocephala, Ctenostegus mummibidge 2146.
food preferences, Suctia carolina 5165.
food selection, predatory behavior, Agonum dorsale 8299.
food selection, predatory behavior, Pardosa vancouveri 4349.
identification, predator-prey interactions, precipitin test 1690.
kaïromones, effects on predatory behavior, Amblyseius fallacis, Phytoseiulus
macropilis 2156.
nests, behavior, Pison, Australia 1957.
population density, foraging behavior, Coccinellidae 6739.
population density, predator-prey interactions, cannibalism, Parasitodera
angustipennis 3642.
population density, predator-prey interactions, predators stability, Notonecta
hoffmanni 3646.
population density, spatial distribution, predatory behavior, Phytoseiulus
persimilis, Amblyseius degenerans 4350.
predation, oviposition, population dynamics, Aphelinus thomsoni, Drepanosiphum
platanoides 2887.
predators collection, storage, Hypera, Odynerus dilectus 7524.
spatial distribution, predator-prey interactions, predatory behavior,
Phytoseiulus persimilis, Amblyseius degenerans 4356.
species composition, webs, Dictyna, Egypt, Arab Rep. 480
- Prisplanis,**
man, venom, Lactrodectus mactans 7395.
- Prisprospatella,**
taxonomy, keys, Prospatellinae 2456.
taxonomy, new genera, morphology 2450
- Prismaque,**
livestock infection, pest control, Theileria sergenti, Babesia bigemina 3682
- Primary production,**
population-environment relations, pests, Fragaria vesca, Tetranychidae arcae
2060
- Priochirus lunatus,**
new species, taxonomy, morphology, India, Sri Lanka 4809
- Priocnemis erythrothorax,**
prey 2146.
- Priocnemis mlatras,**
morphology, developmental stages 864
- Priocystus robiniae,**
pest outbreaks, biological control, parasites, Neospectana carpocapsae 733
- Priopus arenarius,**
new species, taxonomy, morphology, USA, New Mexico 7957
- Priopus coriarius,**
geographical distribution, population decline, German Dem. Rep. 4718
- Priopus linsleyi,**
new species, taxonomy, morphology, USA, Arizona 7957
- Pristiphora compressa,**
morphology, keys, British Isles 5646
- Pristiphora confusa,**
new records, geographical distribution, British Isles 7886
- Pristiphora cretica,**
new species, taxonomy, morphology, Crete 6427
- Pristiphora erichsonii,**
larvae feeding behavior, deterrents, host plants, Larix laricina 623
- Pristiphora lanifera,**
new records, geographical distribution, British Isles 5512
- Pristiphora pallida,**
morphology, keys, British Isles 5646
- Pristiphora wesmali,**
morphology, keys, British Isles 5646
- Pristomerus spinator,**
parasites, Elasmopalpus lignosellus, USA, Texas 3577
- Pristomerus vulnifer,**
infection, overwintering larvae, Laspeyresia pomonella 9004
- Pristonychus martensi,**
new species, Nepal 808
- Proba hyalina,**
new records, geographical distribution, USA, Florida 5534
- Probability,**
characteristics, classification methodology, systematics, Insecta 3169.
population growth, population dynamics, Tribolium 3647.
- Proboscis,**
functional morphology, glossa length, Bombus 8895.
- Procarbazine,**
chromosomes damage, Drosophila melanogaster 2324.
- Prociavia capensis,**
hosts, Ixodes matoji, Zimbabwe 519.
- Procecidochares utilis,**
natural enemies, Bracon, Eurytoma, India 3615.
- Processed foods,**
pest control, nutrition, Tribolium confusum 8078
- Prochyliza azteca,**
carnion, community composition, succession, Costa Rica 5166.
- Prociptilus,**
Fraxinus excelsior association, parasitoids, life cycle, Ephedrus plagiator 9142
- Prociptilus fraxinifolii,**
hosts, parasites, Aphelinus prociptili, USA, Iowa 39
- Prociptilis,**
pest control, golf courses ponds, urea growth regulators 8546.
pest control, growth regulators, urea, Bay SIR-8514 4601.
- Procordulia grayi,**
geographical distribution, abundance, New Zealand 9501.
- Procordulia smithii,**
thermoregulatory behavior, body temperature, New Zealand 6701.
- Proctolaelaps pygmaeus,**
infestation, man, skin diseases, New Zealand 2171.
- Proctos,**
analogs, structure-activity relationships, Periplaneta americana 8957
effects on, smooth muscles, contraction, reproductive organs, Tabanus proximus
965
insecta neurotransmitters, effects on mammalia behavior 200
neurons, biochemical analysis, Insecta 3284
- Proctotrupidae,**
morphology, taxonomy 4020.
- Proctotrupidae,**
new records, geographical distribution, Poland 9467
- Procyon lotor,**
parasites, transmission, Ixodes texanus, USA, Connecticut 1004.
- Prodansineura flavifacies,**
new species, taxonomy, morphology, Zambia 7237.
- Prodenia ornithogalli,**
larvae, grazing, levers, Glycine max 1257.
- Prodiamesa,**
karyotypes, phylogeny 2407.
karyotypes, phylogeny, taxonomy 2408.
- Prodiamesa levanidovae,**
new species, taxonomy, morphology, USSR, Teyloye L. 6389.
- Prodipterychus,**
pests, new records, seeds, Zea mays, India, Punjab 7735.
- Prodipterychus,**
apiculture, Apis mellifera, Panama 2212
apiculture, China, People's Rep. 2974.
apiculture, hives, mobility 2978
apiculture, land use effects on, USA, Georgia 6179.
biomass, dry weight, Ctenoporus sylvestris, USA, New York, Hudson R. 756.
economics, apiculture, USSR 2996
efficiency, food conversion, energy budget, honey, Apis mellifera 873.
eggs, elimination, iron radiotopes, environmental factors, Drosophila
melanogaster 366.
energy budget, developmental stages, Oryzaephilus surinamensis 173.
feeding, population dynamics, Acrididae, South Africa 8365.
fruit-marking pheromone, site location, Rhagoletis pomonella 3353.
honey, apiculture, artificial diets, pollen, Apis mellifera 5306
honey, apiculture, diets, Apis mellifera 3754.
honey, apiculture, diets, Apis mellifera 5304
honey, apiculture, economics, Japan 7721.
honey, correlation analysis, sugar plasma levels, Apis mellifera 5325.
honey, foraging behavior, comparison, strains, Apis mellifera 4595.
honey, methodology, apiculture 2970.
honey, queens, apiculture 7761.
larvae, Aedes, Canada, Quebec, La Grande R. 567.
larvae, mating age, effects on, Glossina pallidipes 7423.
life cycle, Chronomus plumosus, USSR, Armenia, Sevan L. 7805.
males, castes, colonial characteristics, Myrmica rubra 2277
mass rearing, Dacus cucurbitae, Japan 1850.
methodology, pathogens, biological control, Beauveria bassiana, Lepidoptera
decimlineata 1404
nectar, plants, effects on pollinators 523.
nectar, pollinators competition, Centaurea scabiosa, Centaurea nigra 6803.
nutrient requirements, rearing, Nephrotettix ciniceps 856
population growth, host-parasite interactions, Bracon hebetor, Ephesia caustella,
Achroia grisella, Galleria mellonella 1227.
regulation, pheromones, seasonal variations, Apis mellifera 212.
season feeding, larvae, Brachycentrus spinus, USA, North Carolina 1484.
wool, infestation effects on, sheep, Damilina ovis 6889
workers, sex ratio, queens mortality, Apterostigma dentigerum 3047.
- Productivity,**
frugivory, Tropoderna granarius 5763
growth, life cycle, Ephemeroptera 7012
population growth, competition, Sitophilus oryzae, Sitophilus granarius 7595.
stands, defoliation effects on, Orgyia pseudotsugata, Coniferales, USA, Idaho
3601
temperature, effects on ecological distribution, Drosophila affinis, Drosophila
alioquim, Drosophila athabasca 4445.
toxicity, fumigants, comparative studies, Sitophilus oryzae, Tribolium castaneum
1074
- Protenofos,**
pesticides, effects on biological activity, Culicidae, Musca domestica,
Trichopoda si 5775.
- Proformica jacti,**
new species, taxonomy, morphology, Mongolia, People's Rep. 8678.
- Progeny,**
oogenesis, sterility, proleone effects on, Glossina moritans moritans 5093.
radiation, sexual reproduction, longevity, Pectinophora gossypiella 2688.

- Progeny, (continued)**
sterility, precocene effect on, *Glossina morsitans morsitans* 2698.
- Progomphus obscurus**,
larvae, burrowing behavior, substrate preferences, spatial distribution, streams 7023.
- Prolythius peruanus**,
new genera, taxonomy, morphology, South America 7949.
- Prokelisia**,
taxonomy, synonymy, keys, USA 8813.
- Prokelisia caroline**,
new species, taxonomy, morphology, USA 8813.
- Prokelisia delius**,
new species, taxonomy, morphology, USA 8813.
- Prokelisia marginata**,
developmental stages, parasitoids, USA, Florida, Oyster Bay 4368.
- Proleptis tuxeni**,
new species, taxonomy, morphology 4065.
- Prolinae**,
synthesis, hormones, lipid metabolism, fat body, *Glossina morsitans* 8089.
- Prolinybia marginata**,
mating behavior, sperm storage 8258.
- Promachus fuscicornis**,
taxonomy, morphology, India 7184.
- Promachus jabalpurensis**,
new species, taxonomy, morphology, India 7184.
- Promoters**,
location, genes, Bombyx mori 4663.
- Promuncheila lukoschusi**,
new species, parasites, morphology, Mammalia 92.
- Pronolagus crassicaudatus**,
hosts, *Ixodes matoji*, Zimbabwe 519.
- 2-Propanol**,
effects on polytene chromosomes, anisotropy, *Drosophila nebulosa* 7844.
- Propagulae**,
pesticide resistance, selection, *Nephotettix cinctipes* 305.
- Propiocyctus**,
taxonomy, keys 35.
- Propiocyctus indicus**,
new species, morphology, geographical distribution, Asia 35.
- Propolis**,
effects on asphyxia tolerance, colonies, *Apis mellifica carnea* 1413.
- Propoxur**,
insecticides, pesticide resistance, strains, *Nilaparvata lugens* 4222.
- Proprioseipis tamperellus**,
predator-prey interactions, fecundity, development, oviposition, *Tetranychus* 362.
- Propyl cyclohexanecarboxylate**,
deuteration, attractancy, *Blattella germanica* 3734.
- Propylaea japonica**,
chemical control, insecticides, *Coccinellidae* 1417.
- Proreus**,
cytogenetics, chromosomes 7841.
- Prostinotermes simplex**,
castes differentiation, methoprene, precocene effects on, antagonism 6647.
- Prostomium**,
defence secretions, toxins, biochemical analysis 3383.
- Prosimulium laanii**,
new species, taxonomy, morphology, Morocco 3993.
- Prosimulium mixtum**,
larvae, pathogens, *Microsporida* 1018.
- Prosimulium nigripes**,
vectors, *Oncocercia tarsicola*, *Cervus elaphus* 662.
- Prosimulium onychodactylum**,
records, occurrence, geographical distribution, aquatic environment, USA, California, San Geronio Mts. 1572.
- Prosmidia**,
taxonomic revision, morphology, phylogeny, Africa 7168.
- Prosmidia**,
taxonomic revision, morphology, phylogeny, zoogeography, Africa 7168.
- Prosochila**,
imaginal discs, enzymatic activity, aldehyde oxidase, histochemistry 955.
- Prosochis**,
host plants, life cycle, overwintering, *Tetralopha euphemella*, USA, Texas 5961.
- Prosochis**,
fruits, infestation, galls, *Eriophyes prosopidis*, India 3591.
- Prospaltella opulenta**,
parasites, pest control, biological control, *Aleurocanthus woglumi*, USA, Florida 2946.
- Prospaltella opulenta**,
parasitoids, emergence, survival, insecticides effects on 2245.
- Prospaltella perniciosi**,
parasites, pest control, *Quadraspis perniciosus*, Greece 2956.
- Prospaltella**,
taxonomy, *Encarsia*, keys 2456.
- Prospaltella inquirenda**,
pests, biological control, *Aphytis lepidosaphes*, Spain, Valencia 1458.
- Prostaglandins**,
reproductive organs, pheromone emission, *Trichoplusia* ni 8097.
- Protophanus truncatus**,
stored products pests, effects on chemical content, *Zea mays* 3767.
- Prostigmata**,
decomposition, leaf litter 2133.
- Prostolonia**,
new genera, taxonomy 6368.
- Prostolonia martinezii**,
new species, taxonomy, morphology, Venezuela 6368.
- Protargrois obscura**,
trapping, attractants 6144.
- Protandrena bancrofti**,
venom gland skeleton, morphology 93.
- Protandry**,
diapause, pupae, adaptiveness, *Leptidea sinapis* 5890.
- Protandry**,
larvae growth, pupae duration, *Papilio polyxenes* 6725.
- Protandry**,
reproductive strategy, emergence, *Lepidoptera* 5885.
- Protandry**,
sexual reproduction, *Apis mellifera*, USA, California 323.
- Protease**,
inhibitors, hemolymph, metamorphosis, Bombyx mori 7478.
- Protection**,
environmental conditions, parental behavior, brood care, *Euscorpius* 5108.
- Protection**,
light traps, methodology, *Culicidae*, USA, California 859.
- Protection**,
pests, forest management, *Insecta*, Germany, Fed. Rep. 1392.
- Protein biosynthesis**,
accessory gland, *Rhodnius prolixus* 3375.
- Protein biosynthesis**,
age effects on, tRNA aminoacylation, *Drosophila melanogaster* 4235.
- Protein biosynthesis**,
cell lines, imaginal discs, wings, *Trichoplusia* ni 8896.
- Protein biosynthesis**,
digestive tract, larvae, Bombyx mori 959.
- Protein biosynthesis**,
Drosophila C virus, cell culture, *Drosophila melanogaster* 1032.
- Protein biosynthesis**,
egg production, methotrexate effects on, toxicity, *Bracon hebetor* 8203.
- Protein biosynthesis**,
embryogenesis, DNA, RNA, *Hyalomma dromedarii* 5829.
- Protein biosynthesis**,
embryogenesis, *Drosophila* 1537.
- Protein biosynthesis**,
enzymatic activity, juvenile hormones effects on, *Insecta* 3331.
- Protein biosynthesis**,
fat body, *Galleria mellonella* 6572.
- Protein biosynthesis**,
fat body, juvenile hormones, *Locusta migratoria* 1775.
- Protein biosynthesis**,
fat body, tunicamycin effects on, *Galleria mellonella* 6556.
- Protein biosynthesis**,
fibroin, silk gland, poly(A)-containing mRNA, purification, Bombyx mori 8979.
- Protein biosynthesis**,
flight muscle, mitochondria, cytoplasm, *Caliphondae* 2567.
- Protein biosynthesis**,
gene expression, ecdysteroid effects on, cell lines, *Drosophila* 3336.
- Protein biosynthesis**,
gene expression, *il15u1*¹⁵⁷⁶ temperature-sensitive mutant, *Drosophila melanogaster* 8641.
- Protein biosynthesis**,
gene expression, salivary gland, larvae, *Chironomus thummi* 3880.
- Protein biosynthesis**,
globin precursors, cell-free system, *Chironomus thummi* 3075.
- Protein biosynthesis**,
heat shock, mRNA translation, *Drosophila* 8932.
- Protein biosynthesis**,
heat shock, mRNA translation, *Drosophila melanogaster* 5708.
- Protein biosynthesis**,
hemolymph, developmental stages, fat body sequestering, *Calpodus ethiops* 6557.
- Protein biosynthesis**,
histone H2b, heat shock, *Drosophila* 7325.
- Protein biosynthesis**,
imaginal discs, *Drosophila melanogaster* 3507.
- Protein biosynthesis**,
induction, vitellogenesis, polyribosomes, juvenile hormones, *Locusta migratoria* 190.
- Protein biosynthesis**,
infection, Sindbis virus, *Aedes albopictus* 8123.
- Protein biosynthesis**,
juvenile hormones control, fat body uptake, Bombyx mori 2726.
- Protein biosynthesis**,
juvenile hormones, inhibition, compactin, *Manduca sexta* 6558.
- Protein biosynthesis**,
oogenesis, *Drosophila melanogaster* 394.
- Protein biosynthesis**,
plasma proteins, fat body mRNA, Bombyx mori 3913.
- Protein biosynthesis**,
puffing, salivary gland chromosomes, *Drosophila hydei* 5447.
- Protein biosynthesis**,
RNA biosynthesis, developmental stages, *Acyrtosiphon pisum* 934.
- Protein biosynthesis**,
mRNA, Sindbis virus, cell-free system, *Aedes albopictus* 3057.
- Protein biosynthesis**,
mRNA translation, embryos, *Manduca sexta* 3887.
- Protein biosynthesis**,
salivary gland, development, larvae, *Drosophila melanogaster* 8111.
- Protein biosynthesis**,
salivary gland, developmental stages, puffing, *Chironomus tentans* 2302.
- Protein biosynthesis**,
testes, control, juvenile hormones, ecdysterone, *Tenebrio molitor* 386.
- Protein biosynthesis**,
translation errors, developmental stages, *Drosophila melanogaster* 1536.
- Protein biosynthesis**,
vitellins, vitellogenins, *Hyalophora cecropia*, *Tenebrio molitor*, *Aedes aegypti* 7313.
- Protein biosynthesis**,
vitellogenesis, *Thermobia domestica* 6656.
- Protein biosynthesis**,
vitellogenin, fat body, *Locusta migratoria* 8942.
- Protein biosynthesis**,
vitellogenin, follicles, *Drosophila melanogaster* 3506.
- Protein biosynthesis**,
vitellogenin, molting hormones, males, *Sarcophaga bullata* 3367.
- Protein biosynthesis**,
webs fibers, *Nephila clavipes* 186.
- Protein biosynthesis**,
wing discs, defective mutant, *Drosophila melanogaster* 3908.
- Protein biosynthesis**,
wing discs, *Galleria mellonella* 2575.
- Protein composition**,
diapause eggs, lines, Bombyx mori 9420.
- Protein composition**,
diets, interaction, mycotoxins, effects on growth, *Tenebrio molitor* 1113.
- Protein composition**,
digestive tract, blood meals, immunology, *Dermaconer andersoni* 4997.
- Protein composition**,
DNA biosynthesis, RNA biosynthesis, silk gland, instars, *Philaema cynthia* 2727.
- Protein composition**,
gene localization, population genetics, *Drosophila melanogaster* 2350.
- Protein composition**,
hemolymph, coloration, population studies, *Philaema spumarius* 8945.
- Protein composition**,
myosin, flight muscle, *Drosophila melanogaster* 1770.
- Protein composition**,
ribonucleoproteins, U1 RNA, heat shock, *Drosophila* 8623.
- Protein composition**,
spontaneous, Y chromosome mutants, *Drosophila hydei* 2333.
- Protein composition**,
venom, *Vespa mandarinia* 2665.
- Protein kinase**,
cyclic nucleotides, epidermis, molting, *Melanoplus sanguineus* 6518.
- Protein sources**,
diets, apiculture, *Apis mellifera* 3754.
- Protein synthesis**,
cuticle, developmental stages, *Locusta migratoria migratoroides* 4120.
- Proteinase**,
biochemical analysis, Bombyx mori 4993.
- Proteinase**,
characterization, isoelectric focusing, *Insecta* 5692.
- Proteinase**,
inactivation, zygotes, *Plasmodium gallinaceum*, *Aedes aegypti* 8126.
- Proteinase**,
isolation, characterization, midgut, *Cimex hemipterus*, *Cimex lectularius* 8950.
- Proteinase**,
virulence, *Pseudomonas aeruginosa*, *Galleria mellonella* 5738.
- Proteinase inhibitors**,
characterization, embryos, *Hemileuca olivae* 4245.
- Proteinase inhibitors**,
purification, characterization, eggs, *Hemileuca olivae* 2573.
- Proteins**,
acetylcholine receptors, characterization, purification, *Musca domestica* 899.
- Proteins**,
adsorption, oocytes, vitellogenesis, *Locusta* 2715.
- Proteins**,
antibodies, biochemical analysis, *Drosophila melanogaster* 3270.
- Proteins**,
antifreeze, purification, amino acid composition, *Tenebrio molitor* 5688.
- Proteins**,
artificial diets, rearing, *Spirulina platensis*, Bombyx mori 3239.
- Proteins**,
attractants, chemical analysis, *Dacus tryoni* 3757.
- Proteins**,
biochemical analysis, abdomen, cuticle, *Locusta migratoria* 2515.
- Proteins**,
biochemical analysis, cross-linking, larvae, cuticle, *Sarcophaga bullata* 884.
- Proteins**,
biochemical analysis, *Drosophila melanogaster* 3912.
- Proteins**,
biochemical characteristics, pancreas, brain isolation, *Caliphora vomitoria* 963.
- Proteins**,
calmodulin, biochemical analysis, *Schistocerca gregaria* 3335.
- Proteins**,
characterization, effects on head development, embryos, *Smittia* 1085.
- Proteins**,
chemical composition, antibacterial agents, *Hyalophora cecropia* 203.
- Proteins**,
chorion, conformational analysis, Raman spectroscopy, Bombyx mori 5825.
- Proteins**,
chorion, translation, mRNA, Bombyx mori, microinjection, oocytes *Xenopus laevis*, cDNA hybridization analysis 8083.
- Proteins**,
cricket paralysis virus, purification, characterization, cell culture, *Drosophila melanogaster* 8991.
- Proteins**,
cuticle, biochemical analysis, developmental stages, *Locusta migratoria migratoroides* 4120.
- Proteins**,
cuticle, gene expression, development, *Drosophila melanogaster* 3911.
- Proteins**,
diets, effects on oogenesis, *Culex pipiens pallens* 5819.
- Proteins**,
diets, hemolymph, ovaries, *Dysdercus koenigii* 7480.
- Proteins**,
diets, nutrient sources, effects on locomotor activity, *Anthonomus grandis*

Proteins, (continued)

- gravidis* 8276.
digestion, amidases, midgut, *Rhynchosciara americana* 6545.
DNA, characterization, baculovirus, isolation 3392.
enzyme-linked immunosorbent assay, nuclear polyhedrosis virus, cell culture, larvae, *Insecta* 1091.
evolution, chorion genes, cDNA nucleotide sequence, *Bombyx mori* 8630.
genes, evolution, *Bombyx mori*, *Antheraea pernyi* 4666.
genetic variance, allozymes, *Pardosa* 3927.
heat shock, association chromatin, characterization, *Drosophila melanogaster* 4158.
heat shock, biosynthesis, developmental stages, *Drosophila melanogaster* 5686.
heat shock, gene expression, cell lines, salivary gland, *Drosophila* 8634.
heat shock, gene expression, ecdysterone stimulation, cDNA, hybridization analysis, cell lines, *Drosophila* 7835.
heat shock, gene expression, loci 87A7 locus, 87C1 locus, mutants, *Drosophila melanogaster* 8645.
heat shock, genes, DNA nucleotide sequence, *Drosophila melanogaster* 8631.
heat shock, genes, hybridization, localization, *Drosophila melanogaster* 4672.
heat shock, induction inhibition, picornavirus, tissue culture, *Drosophila melanogaster* 982.
heat shock, nucleotide sequence, genes, *Drosophila melanogaster* 8629.
hemagglutination, hemolymph, larvae, *Lepidoptera decemlineata* 4160.
hematology, biochemical analysis, *Chironomus thummi thummi* 3306.
hemolymph, γ radiation effects on, *Dacus dorsalis* 7358.
hemolymph, antibiotics, chloramphenicol effects on, nutrient deficiency, *Apis mellifera* 8110.
hemolymph, binding, juvenile hormones, larvae, *Diatraea grandiosella* 207.
hemolymph, fat body sequestering, developmental stages, *Calpod ethiops* 6557.
hemolymph, nuclear polyhedrosis virus infection effects on, *Heliothis armigera* 420.
hemolymph, oogenesis, *Rhynchosciara americana* 3516.
hemolymph, uptake, oocytes, *Cryodes peregrinus* 4271.
hemolymph, workers, seasonal variations, polyphenism, *Apis mellifera* 3339.
histochemistry, yolk, chemical composition, oogenesis, *Sarcophaga ulicornis* 1083.
hysteresis, biochemical analysis, *Oncopeltus fasciatus* 1756.
immunology, cell lines, clones, *Drosophila melanogaster* 2513.
incorporation, oogenesis, *Locusta migratoria migratorioides* 1887.
integrated, biochemical analysis, structure, *Heliothis zea* 885.
isolation, chromatin, *Trichoplusia ni* 7049.
juvenile hormones metabolism, enzymatic activity distribution, *Trichoplusia ni* 206.
juvenile hormones, plasma levels, queens, *Apis mellifera* 5001.
levels, DNA, RNA, metamorphosis effects on, *Bombyx mori* 952.
lipids, terminology, lipophorins, hemolymph, *Insecta* 94.
lipophorin, lipids, biosynthesis, fat body, vitellogenin, biochemical analysis, *Locusta migratoria* 3330.
metabolism, nuclear polyhedrosis virus infection effects on, *Aporia crataegi* 4283.
nuclear membranes, isolation, characterization, embryos, *Drosophila melanogaster* 4283.
opsin, pigments, rhodopsin, photoreceptors, mutation, vitamin A, *Drosophila melanogaster* 1740.
pancreas, immunocytochemistry localization, brain, *Eristalis aeneus* 2523.
plasma, amino acid composition, fat body mRNA protein biosynthesis, *Bombyx mori* 3913.
purification, characterization, flight muscle, *Apis mellifera* 2578.
ribosomal protein S6, dephosphorylation, heat shock, *Drosophila melanogaster* 7319.
salivary gland, biochemical characteristics, larvae, *Chironomus tentans* 6551.
salivary gland secretion, ecdysone effects on, *Manodusa sexta* 2610.
salivary gland secretions, infection effects on, *Trypanosoma brucei*, *Glossina morsitans morsitans*, 8155.
secretions, characterization, accessory gland, *Drosophila funebris* 8118.
spermatophores chemical composition, *Glossina morsitans* 354.
storage, characterization, immunological aspects, *Dacus oleae* 2579.
storage, fat body, metamorphosis, *Sarcophaga peregrina* 3318.
storage, identification, purification, *Galleria mellonella* 6567.
storage, mRNA identification, *Sarcophaga peregrina* 8088.
structure, sclerotization, pupae, *Diptera* 8943.
testes, development, *Tenebrio molitor* 3520.
translocation, distribution, heat shock, Kc cells, *Drosophila* 7838.
venom, biochemical analysis, *Heterometrus scaber* 4178.
venom, biochemical analysis, *Polydes comanchus navajoe*, *Vespa orientalis* 4231.
vitellin, binding, molting hormones, *Locusta migratoria* 3519.
vitellogenesis, immunochemistry, antisera, distribution, *Locusta migratoria* 1133.
vitellogenin, bioaccumulation, development, developmental stages, *Bombyx mori* 3498.
vitellogenin, oogenesis, *Diploptera punctata* 1884.
yolk, characterization, purification, *Drosophila melanogaster* 5830.
yolk, gene expression, 20-hydroxyecdysone effects on, fat body, *Drosophila melanogaster* 6243.
yolk, genes, mRNA, nucleotide sequence, ecdysone effects on transcription, *Drosophila melanogaster* 4662.
- Proteinase longicauda**,
habitat, leaf litter, Switzerland 7621
- Proteus cristatus**,
food organisms, Trinervitmes, Namibia, Namib Desert 9193
- Proteolytic enzymes**,
enzymatic activity, midgut, *Haematobia irritans* 2551
- Proteramaeus macleani**,
new species, taxonomy, morphology, USSR 7933
- Proterolabus fuscus**,
population structure, seasonal variations, physical activity, Finland 5242
- Proteus**,
pathogens, infection, *Boophilus decoloratus* 5030
- Proteus mirabilis**,
pathogens, infection, *Boophilus decoloratus* 5030
- Prothiobos**,
pollution effects, uptake, *Culex pipiens* 4219
- Prothoracic gland**,
cells, ionic exchange, physicochemical properties, developmental stages, *Galleria mellonella* 6591

- Prothoracic glands**,
diapause, activation, *Calliphora vicina* 6639.
- Prothorax**,
glands, juvenile hormones sensitivity, *Manestra brassicae* 3391.
glands, sensitivity, juvenile hormones, *Manestra brassicae* 3387.
- Protocalliphora**,
hosts, new records, parasitoids, *Tachinaephagus zealandicus* 4378.
- Protocorysomyia howardae**,
taxonomy, synonymy, *Cochliomyia macellaria* 7183.
- Protococcus viridis**,
food organisms, feeding, *Clemensia albata* 7509.
- Protodiaspis didymus**,
larvae, morphology 1715.
- Protodiaspis varus**,
larvae, morphology 1715.
- Protodinychus punctatus**,
morphology, genitalia, males, nymphs 6480
- Protodonata**,
paleoecology, Upper Carboniferous, USA, Pennsylvania 2376
- Protomyobia americana**,
parasites, *Sorex cinereus* 9149
- Protomyobia indianensis**,
parasites, *Sorex longirostris* 9149
taxonomy, new species, morphology, parasites, hosts, *Sorex longirostris*, USA, India 1591
- Protophormia terraenovae**,
fat body origin, differentiation 342.
insecticides effects on activity, monophenol monooxygenase, peroxidase 9029.
insecticides effects on feeding behavior, circadian rhythms 5772.
- Protoplasma pyriiformis**,
developmental stages, morphology, keys 4097.
- Prototrotopera**,
paleoecology, Upper Carboniferous, USA, Pennsylvania 2376.
- Protosialis**,
new species, taxonomy, morphology, South America, Amazon R. Basin 7235
- Protozoa**,
cellulase activity, digestive tract, salivary gland, *Mastomys darwinensis* 5931.
commensals, aquatic organisms, lakes, *Insecta*, India 7022.
parasites, effects on population density, *Tipula paludosa*, North America 2907.
symbionts, lipid biosynthesis, *Reticulitermes flavipes*, *Coptotermes formosanus* 3573.
symbionts, survival, hardwoods extracts effects on, *Reticulitermes flavipes* 3808
- Proteranalsia**,
taxonomy, new species, morphology, infestation, *Salvia mouroctiflora*, roots, India, Kashmir 1641
- Protura**,
taxonomy, keys, new species, USA, Alaska 4062
- Prunus amygdalis**,
host plants, damage, infestation susceptibility, *Amyelois transitella* 2240.
nuts, attractants, oviposition traps, *Amyelois transitella* 6170.
- Prunus amygdalis**,
orchards, ectoparasites, *Tetranychidae*, USA, California 1391.
orchards, pest control, *Tetranychus caespitum*, *Solenopsis xyloni*, USA, California 6907
- Prunus padus**,
host plants, population dynamics, gynaepare, *Rhopalosiphum padi*, Finland 5226.
- Prunus patas**,
host plants, growth, survival, reproduction, *Rhopalosiphum padi* 2838.
- Prunus persica**,
feeding behavior deterrents, leaves, cyanide, *Choristoneura rosaceana* 8501.
host plants, disease resistance, disease transmission, plum pox virus, *Myzus persicae*, *Myzus varians* 1259.
orchards, pests, population dynamics, *Grapholita molesta*, Brazil 6034
- Prunus serotina**,
host plants, bioomics, *Phloeotribus lumnalis* 9115
- Prunus serotina**,
pests, abundance, seasonal variations, *Pseudaulacaspis pentagona* 6089
- Pyrella sinica**,
host-parasite interactions, host plants developmental stages, assimilation, Japan 981.
larvae, aggregation, adaptiveness, effects on survival 1192
- Psallidorema**,
taxonomy, synonymy 8775
- Psallus amorphae**,
morphology, new species, *Psallus physocarpus*, USA, New York 2435.
- Psallus physocarpus**,
new species, taxonomy, morphology, genitalia, USA, New York 2435.
- Psallus salicinus**,
introduced species, geographical distribution, Canada, British Columbia 4007.
- Psamatthocrita oseeila**,
new records, geographical distribution, Sweden 4722
- Psammophilus porcellio**,
habitat, ecological distribution, life cycle, dunes, France Coast 5982.
- Psammotermes hybostoma**,
effects on soil properties, organic matter, soil nutrients 6017.
pesticides effects on enzyme activity, cholinesterase 5762.
- Psammotettix alienus**,
host preferences, population density, grasses 710.
- Psammotettix lividellus**,
host preferences, population density, grasses 710
- Psara basalis**,
larvae, pathogenicity, *Pachylomyces farinosus* 1001
- Pydylia montana**,
new species, taxonomy, morphology, USSR, Transcaucasia 6423.
- Pselaphidae**,
morphology, Kenya 1605.
- Psennini**,
geographical distribution, British Isles 6312
- Psephenidae**,
geographical distribution, world, surveys 5507.
- Pseudochorites quadricornis**,
new species, taxonomy, morphology, USA, Florida 1618
- Pseudochorutinae**,
surveys, Brazil 4745

297

- Phorophora columbiana**,
chemical control, efficacy, comparative studies 744.
hosts, blood meals, domestic animals, females, USA, Texas 6074.
insecticides, acaricols, evaluation, wind tunnels 6203.
pest control, efficacy, isosteryl alcohol surface films 8415.
vectors, equine infectious anemia virus transmission 1329.
- Phoroptes**,
gnathosoma, mouthparts, morphology 6497.
medical importance, skin diseases, domestic animals 2932.
parasites, detection methodology 2483.
- Phoroptes communis**,
infestation, pest control, ivermectin, cattle 7640.
sheep scab, disease control, diazinon 646.
skin diseases, domestic animals, incidence, treatment, Sudan 2923.
- Phoroptes cucullii**,
car ectoparasites, goats, Australia 650.
otitis media, association, *Staphylococcus epidermidis*, rabbits 5285.
parasites, infestation, rabbits 2179.
- Phoroptes ovis**,
ectoparasites, transmission, domestic animals, *Ovis canadensis* 651.
parasites, infestation, rabbits 2179.
parasites population growth, seasonal variations, USA, Texas 517.
scabies, disease control, ivermectin, domestic animals 6892.
scabies infestation, cattle susceptibility 2170.
treatment, infection, antibiotics, cattle 8425.
- Phoroptidae**,
pest outbreaks, parasites, cattle, USA 5281.
pesticide applications, spraying, livestock, *Sus scrofa* 8429.
- Phorophora columbiana**,
pests, monitoring methodology, mapping, USA, Louisiana 5397.
- Phrygodontidae**,
geographical distribution, Germany, Fed. Rep., Bavaria, Murnauer Moos 4730.
new species, taxonomy, morphology, USSR, Azerbaijan, Iran 3199.
taxonomy, synonymy 5568.
- Phrygodontus intermedius**,
vectors, Leishmania, habitat, survival 9223.
- Phrygodontus squamiventris maripensis**,
new taxa, taxonomy, morphology, Brazil, Amazonia 5573.
- Phrygodontus squamiventris squamiventris**,
taxonomy, morphology, Brazil, Amazonia 5573.
- Phylla pyri**,
fungal flora, infestation 5730.
predator-prey interactions, orchards, spatial distribution, population dynamics, predators 6211.
- Phylla pyricola**,
growth regulators, daminozide, pest control, population density, host plants 688.
integrated control, methodology, USA, Washington 3008.
pest control, predation, Aves 9334.
pest resistance, host plants, *Pyrus ussuriensis* × *Pyrus communis* 3720.
- Phyllophagus**,
morphology, taxonomy, new species, keys, Africa 1649.
synonymy, taxonomy, morphology 4113.
- Phyllophagus belanensis**,
synonymy, *Phyllophagus tobiiasi* 4113.
- Phyllophagus tobiiasi**,
synonymy, *Phyllophagus belanensis* 4113.
- Phyllidae**,
parasites, morphology, developmental stages, *Prionomitus mitratus* 864.
- Phyllodes chryscephala**,
pests, agricultural land, surveys, abundance, British Isles, England 2260.
- Phyllodes punctulata**,
overwintering, site selection, habitat, population density 1974.
pests, abundance, habitat, Canada, Saskatchewan 8482.
- Phyllodes tenebrosus**,
pest control, chemical control, pesticides (organophosphorus) 7720.
- Phylloidea**,
association, morphology, taxonomy, Chalcidoidea, Africa 1649.
- Phyllodes punctulata**,
association, abundance, host plants, *Kochia prostrata* 4392.
- Pteracarus miniopieri**,
new records, geographical distribution, Africa 4766.
- Pterelia yunnanensis**,
new species, morphology, China, People's Rep. 24.
- Pteridium**,
host plants, feeding, *Drosophila megagenis*, *Drosophila notha*, Australia 3590.
- Pteridium aquilinum**,
host plants, food preferences, *Schistocerca gregaria* 1245.
- Pterinopeima**,
taxonomy, morphology, Costa Rica 3173.
- Pteroficus catianae**,
new genera, taxonomy, morphology, South America 7949.
- Pterohelaeus alternatus**,
development, fecundity, food plants effects on 7510.
development, longevity, fecundity, temperature effects 3545.
- Pterohelaeus darlingensis**,
development, fecundity, food plants effects on 7510.
development, longevity, fecundity, temperature effects 3545.
- Pteroma plagiopelpe**,
new records, hosts, *Albizia falcataria*, defoliation, Moluccas 2092.
- Pteromalidae**,
new species, morphology, geographical distribution, Asia 35.
- Pteromalus**,
parasitoids, *Hydrellia valida*, USA, Florida, Oyster Bay 3621.
- Pteronarcia badia**,
drumming, auditory communication, geographical variations 8269.
- Pteronarcyidae**,
eggs morphology, phylogeny, taxonomy 8036.
- Pteronarcys**,
synonymy, eggs morphology, *Allonarcys* 8036.
- Pteronarcys dorsata**,
drumming, auditory communication 8269.
- Pteropera**,
taxonomy, morphology, new species, keys, Africa 1668.
- Pterophoridae**,
taxonomy, systematics, Spain, Portugal 2466.
- Pteroptix**,
bioluminescence, enzymatic activity, kinetics 2616.
mating behavior, natural selection 1152.
- Pterostichus adstrictus**,
forests, fires, environmental change, effects on species composition 6840.
- Pterostichus akusianus**,
new species, taxonomy, morphology, Asia 3984.
- Pterostichus bugianensis**,
new species, taxonomy, morphology, Asia 3984.
- Pterostichus crenuliger**,
pests, Triticum, USSR, Ukraine 6919.
- Pterostichus cupreus**,
pests, Triticum, USSR, Ukraine 6919.
- Pterostichus lucublandus**,
fires, environmental change, effects on species composition 6840.
- Pterostichus melanarius**,
food preferences 4355.
- Pterostichus nigrita**,
circadian rhythms, locomotor activity, entrainment, photoperiod 6694.
development, long-term effects, photoperiod, temperature, climatic conditions 7443.
enzyme activity, digestive tract, carnivores, diets 6544.
photoperiod effects on corpora allata activity 2700.
- Pterostichus paazeri**,
life cycle, reproduction, Austria 6706.
- Pterostichus pensylvanicus**,
forests, fires, environmental change, effects on species composition 6840.
- Pterostichus puncticollis**,
pests, Triticum, USSR, Ukraine 6919.
- Pterostichus sericeus**,
pests, Triticum, USSR, Ukraine 6919.
- Pterostichus ulabeyensis**,
new species, taxonomy, morphology, Asia 3984.
- Pterygota**,
phylogeny, neurosecretion, distribution, brain 123.
- Ptilidae**,
new species, taxonomy, morphology, Denmark 4783.
- Ptilium borioni**,
new records, geographical distribution, Sweden 4726.
- Ptilodactyla**,
geographical distribution, new records, Sweden 3943.
- Ptiloneura bidorsalis**,
morphology, taxonomy 6507.
- Ptisicla aptera**,
gametes, ultrastructure 9037.
- Ptiolina**,
breeding, site location, substrate preferences 3534.
- Ptomacopus morio**,
larvae, morphology, keys 5637.
- Ptychoseura**,
eggs, new records, parasitism, *Rhopalum clavipes*, Canada, Ontario 4377.
- Ptychopius phalaris**,
taxonomy, new genera, new species, morphology, Ecuador 835.
- Ptycta hispanica**,
new species, taxonomy, morphology, Spain 4908.
- Ptycta naderi**,
new species, taxonomy, morphology, Israel 8841.
- Public health**,
infestation, pests, Insecta 2177.
parasites, Acari, Mallophaga 9263.
safety, pest control, nuclear polyhedrosis virus, *Meinstra brassicae* 7717.
Salmonella isolation, Blattidae, India 6076.
- Pubilia concava**,
effects on host plants infestation, *Solidago altissima* 2073.
- Puerto Rico**,
new records, geographical distribution, nests, colonial characteristics, *Solenopsis invicta* 4642.
sexual dimorphism, new records, *Willowsia jacobsoni* 1619.
species composition, new records, *Coccoida* 3951.
- Puffing**,
chromosomes, heat shock effects on, *Drosophila melanogaster* 759.
chromosomes, protein biosynthesis, gene expression, $k(1)(f)^{ub78}$ temperature-sensitive mutant, *Drosophila melanogaster* 8641.
heat shock, chromosomes structure relationship position effects variegation, *Drosophila melanogaster* 7840.
heat shock effects on chromosomes, salivary gland, *Chironomus tentans* 7828.
polyene chromosomes, aluminum effects on, *Simulium vittatum* 7860.
polyene chromosomes, dimethyl sulfoxide effects on, *Chironomus tentans* 3881.
polyene, temperature effects, larvae, *Chironomus plumosus* 761.
protein biosynthesis, salivary gland, developmental stages, *Chironomus tentans* 2302.
salivary gland chromosomes, gene amplification, *Rhynchosciara americana* 7837.
salivary gland chromosomes, gene expression, RNA biosynthesis, *Chironomus tentans* 3873.
salivary gland chromosomes, heat shock, *Drosophila melanogaster* 2310.
salivary gland chromosomes, protein biosynthesis, *Drosophila hydei* 5447.
- Pulvinaria**,
morphology, taxonomy, keys 3820.
- Pulvinaria deltoidei**,
pest control, natural enemies, ornamental plants, USA, California 9316.
- Pulvinaria elongata**,
synonymy, *Pulvinaria longisqua* 3820.
- Pulvinaria iceryi**,
pest outbreaks, morphology, taxonomy, Mauritius 3820.
- Pulvinaria longisqua**,
synonymy, *Pulvinaria elongata* 3820.
- Pulvinariapadili**,
pests, infestation, clove 2089.
- Pulvinariella mesembryan themi**,
pest control, natural enemies, ornamental plants, USA, California 9316.
- Pulvinariella mesembryanthemi**,
dispersal, larvae, eggs, USA, California 2160.
- Pumpkin mosaic virus**,
disease transmission, feeding behavior effects on infectivity, *Aphis craccivora* 3703.

- Punishment,**
learning behavior, extinction, response acquisition, *Melipona quadrifasciata*
antidotes 6688
- Pupa,**
biology, *Macrodon fuscipennis* 2778.
body size, morphology, *Simulium chutteri* 8880
brain cells, neurosecretion, ultrastructure, *Bombyx* mori 991
breeding sites, substrate specificity, hay, *Stomoxys calcitrans* 9071
chitin biosynthesis, epidermis, *Plodia interpunctella*, *Galleria mellonella* 2516
cold tolerance, overwintering, *Cirpish unpunctella*, *Plusia gamma* 6864
development, body weight, diets, *Heliothis virescens*, *Diatraea saccharalis* 1750
development, environmental effects, temperature, caste differentiation, *Polistes*
foederatus 4315
development, hormones, prothoracicotropic hormone, circadian rhythms, *Samia*
cynthia ricini 3466
development, host plants distribution, *Hypocysta adiantae*, *Xois arectus* 1244
development time, sex differences, comparison, *Heliothis zea*, *Heliothis virescens*
1089
diapause, amino acid composition, hemolymph, *Heliothis armigera* 2676.
diapause, hormones effects on, *Heliothis punctiger* 2679
diapause, metabolism, juvenile hormones, *Sarcophaga* 3477
diapause, photoperiod effects on, *Sarcophaga argyrostoma* 5815
diapause, prothoracic, adaptiveness, *Leptidea sinapis* 5890
DNA biosynthesis inhibition, diflubenzuron, *Stomoxys calcitrans* 1043
Dolopholids major, morphology, geographical distribution, USA, Southeast 1716
dry weight, mathematical analysis, adults, *Choristoneura fumiferana* 7260
duration, prothoracic, *Papilio polyxenes* 6725
emergence, temperature effects on, *Meigachia rotundata* 8230
glycolipid composition, phospholipid composition, *Bombyx mori* 166
growth, muscles, enzymatic activity, *Calliphora* 2718
hemolymph, chemical composition, N.M.R., *Manduca sexta* 2576
Hyalophora ecropia, immune response, Enterobacter cloacae infection 5038
juvenile hormone, effects on growth, morphology, *Diaconia obliqua* 7475
mass, effects on adults fecundity, survival, *Aedes aegypti* 5895
metabolism, nuclear polyhedrosis virus effects on *Bombyx mori* 284
metamorphosis, chilling, crowding effects on, *Galleria mellonella* 2724
metamorphosis, juvenile biosynthesis, *Mamestra configurata* 389
molting, developmental stages, pharate condition, *Tipula paludosa* 4249
morphology, *Aedes micropterus* 8872
morphology, *Carausius dectes*, USA, Oregon 7523
morphology, *Dytiscus verticalis* 5155
morphology, *Geometridae* 80
morphology, *Haplochromis aeneus* 6488.
morphology, *Hypocercus umbrinosa* 5644.
morphology, *Midamus hecabe* 8873
morphology, *Oncideres gutturalis* 6487
morphology, *Pieris brassicae* 5635
morphology, setae, taxonomy, *Cernotina spicata* 1678.
morphology, sex determination, *Hyppisylla robusta* 78.
morphology, taxonomy, new species, *Simulium patziense*, Guatemala 1631.
morphology, *Tipula ultima* 6493.
mortality, predators effects on, *Choristoneura occidentalis* 6083.
mortality, *Synanthedon salmachus*, New Zealand 4415
nuclear polyhedrosis virus replication, abdomen, *Bombyx mori* 5033
parasites, sampling methods, *Musca domestica*, *Stomoxys calcitrans*, Hymenoptera
8857
parasitism, hosts body weight, *Galleria mellonella*, *Gonia cinerascens* 2822.
predation, feeding, *Dendroctonus pubescens*, *Hyalophora ecropia* 7592.
predation, new records, *Scirpus carolinensis*, *Anthera polyphemus*, *Attacus atlas*,
USA, Wisconsin 5265.
proteins, structure, sclerotization, *Diptera* 8943.
 γ radiation, effects on development, *Dacus dorsalis* 7448.
rearing, extraction methodology, media (culture), *Diatraea grandiosella* 4087.
rearing, harvesting methodology, automation, *Diatraea grandiosella* 8024.
rearing methodology, *Simululidae* 4915
RNA polymerase I, purification, characterization, *Drosophila hydei* 8086
sampling, population levels, predators effects on, *Choristoneura fumiferana* 5996.
sexual dimorphism, body size, *Sesamia inferens* 863.
spatial distribution, *Thanasimus dubius*, *Pinus* sedita, *Pinus echinata* 2082
spatial distribution, trees, *Colaradia pandora*, USA, Arizona 6035
spines, abdomen, morphology, *Thyridopteryx epimeraeformis* 8877.
sterilization, chemical control, thiolipase, *Culicoides nubeculosus* 1355.
storage, temperature effects, adults flight activity, *Cochliomyia hominivorax*
1868
survival, cold tolerance, diapause, *Heliothis virescens*, *Heliothis zea* 3627
survival, soil properties effects on, *Dacus opifex*, *Dacus tenuifascia* 1305
susceptibility, parasites, *Neoplectana carpocapsae*, *Galleria mellonella*, *Bombyx*
mori 3406
susceptibility, parasitism, *Neoplectana carpocapsae*, *Lepidoptera* 287.
temperature effects, adults fecundity, mating behavior, *Ephestia cautella*, *Plodia*
interpunctella 1874.
temperature effects, development, diets, *Dacus oleae* 372.
temperature effects, duration, *Simulium nigritarsae*, *Simulium adersi* 1483.
temperature effects on survival, *Patasson lancearei* 9055.
Puparia,
morphology, *Anomoeoceros punctulatus* 5642.
Pupation,
burrowing behavior, larvae, *Dytiscus verticalis* 5155.
development, carvone effects on, diets, *Spodoptera littoralis* 8231.
feeding, 20-hydroxy-ecdysone, starvation effects on, *Calliphora vicina* 7455
hemolymph 20-hydroxy-ecdysone effects on, *Deilephila nerii* 8094.
hemolymph 20-hydroxy-ecdysone effects on, *Deilephila nerii* 8956.
infection effects on, pathogens, *Vairimorpha necatrix*, *Ostrinia nubilalis* 8168
larvae, bogs, *Chaoborus*, USA, Michigan 7015.
metamorphosis, water balance, *Manduca sexta* 7353.
population density, larvae, *Tribolium freemanii* 7469.
site selection, natural selection, *Papilio glaucus*, *Battus philenor* 6293.
site selection, environmental factors, population studies, *Drosophila*
nigroparvula, *Drosophila mettleri* 8375.
soil temperature effects on, *Pectinophora gossypiella* 6167.
Pure culture,
galactose enzymatic activity, developmental stages, *Drosophila melanogaster* 165.
Purification,
adipogen, venom, *Apidae* 8181.
aminopeptidase, *Trinervitermes trinovorens* 931.
antifreeze proteins, larvae, *Tenebrio molitor* 8100.
Purification, (continued)
cecropin B, cecropin D, *Antheraea pernyi* 8952
complex, *Drosophila melanogaster* 2308
DNA, microsurveys, polytene chromosomes, *Chironomus* 8621
ecdysteroids, immunoadsorption, methodology, *Insecta* 58
hemagglutinins, *Teleogryllus commodus* 157
hemolysin, *Stomoxys calcitrans* 178
high mobility group proteins, nuclei, embryos, *Drosophila melanogaster* 7473
hormones, *Manduca sexta* 2588
inorganic pyrophosphatase, embryos, *Hyallomma dromedari* 3316.
isolation, enzymes, α , α -trehalase, *Harmonia axyridis* 944
juvenile hormone esterase, *Trichoplusia* n 939
lipoproteins, hemolymph, *Locusta migratoria* 2555.
mulbenzyme complexes, fructose-bisphosphate aldolase + triosephosphate isomerase,
flight muscle, *Ceratus capitata* 2574
proteins, flight muscle, *Apis mellifera* 2578
ribosomal proteins, *Drosophila melanogaster* 8935.
trial pheromone, *Odontotermes obscurus* 8972.
tyrosine aminotransferase, salivary gland, *Drosophila hydei* 932.
vitellogenin, vitellin, *Calliphora vicina* 177.
Purines,
metabolism, mutants, lethality, *Drosophila melanogaster* 3095.
Purpura,
drug effects, avoidance learning, retention, *Periplaneta americana* 3548.
effects on RNA biosynthesis, salivary gland, *Chironomus thummi* 3882.
Purpuriceni,
taxonomy, nomenclature, synonymy 4807.
Parasita tridentata,
antifeedants, chemical composition, predators, *Leptinotarsa decemlineata* 521.
host plants, pest control, *Phigalia plumigaria*, USA, Utah 3025.
Pusa laqueus,
pesticide residues, toxicity, monocrotophos, insecticides, *Amrasca biguttula*
biguttula 2653.
Putrescine,
hemolymph, physiology, *Heliothis zea* 5684.
Pycha verua,
new species, taxonomy, morphology, Asia, Himalayas 8814.
Pyca verua,
new species, taxonomy, morphology, Asia, Himalayan Mts. 4016.
Pycnogaster cucullata,
sex determination, sex chromosomes, population genetics, Iberian Peninsula 7055.
Pycnospyche flava,
morphology, larvae, females 5633.
Pycnospyche guttifer,
enzymatic activity, digestive tract, diets 1757.
habitat, feeding behavior, larvae, streams, Canada, Quebec 6227.
morphology, case construction, diets, variations, environmental factors, Canada,
Quebec, Matamek R. 8605.
Pydrin,
chemical control, efficacy, *Psorophora columbiae* 744.
Pyemotes tritici,
parasites, infestation, *Araneus fasciculatus*, USA, Florida 5188.
Pyemotidae,
decomposition, leaf litter 2133.
grazing, fungi 2132.
Pyralidae,
occurrence, stored products, pheromone traps, Czechoslovakia 9294.
stored products pests, abundance, Greece 7663.
Pyralis farinalis,
interspecific relationships, attractancy, sex pheromone, *Amyelois transiella*
5839
interspecific relationships, sex pheromone attractancy, *Amyelois transiella*
9076
Pyraustini,
instars, larvae, adults, morphology, taxonomy, keys 844.
Pyrethrin,
insecticides, aerosols, chemical control, *Anopheles quadrimaculatus*, *Culex*
quinquefasciatus 6093.
Pyrethroid,
pesticide resistance, effects on membrane composition, acetylcholinesterase
activity, *Musca domestica* 5792
Pyrethroid esterase,
enzymatic activity, pesticide resistance, larvae, *Chrysopa carnea* 1839.
Pyrethroids,
effects on, nervous system, *Periplaneta americana* 1040.
insecticides, pesticide resistance, strains, *Musca domestica* 4233.
insecticides, susceptibility, pesticide resistance, methyl parathion, *Heliothis*
virescens, USA, South Carolina 4226.
insecticides, toxicity, selectivity, natural enemies, pests, *Insecta* 7408.
pesticide resistance, selection, strains, physiology, *Musca domestica* 1055.
susceptibility, developmental stages, *Culex pipiens* 310.
susceptibility, methyl parathion pesticide resistance, *Heliothis virescens* 8201.
Pyrgodes hamadryas,
pollination, association, *Acacia baileyana* 9158.
Pyrgota undata,
flight, range extension, geographical distribution, new records, USA,
Mississippi, USA, North Dakota 2366.
Pyrgotidae,
geographical distribution, USA, Mississippi 2366.
Pyridafenthion,
pesticide resistance, selection, *Nephotettix cinctipes* 305.
Pyridoxine,
vitamins, nutrient deficiencies, survival, development, larvae, *Heliothis*
virescens 1744
Pyrrilla perpusilla,
hatching, eggs, environmental effects 4259.
Pyroderes rileyi,
host plants, pest resistance, hybrids, *Zea mays* 3716.
Pyroglyphidae,
house dust entomofauna, distribution, altitude, Spain 575
medical importance, allergens, Switzerland 672.
Pyronia tibioensis,
aggregation, food plants 9093
Pyrops candeliaria,
malpighian tubules, functional morphology, ultrastructure 163.

- Pyrrhalta luteola**, defense mechanisms, biochemical characteristics, anthraquinones, anthrones 6734.
pests, biological control, Neoplectana carpocapsae 2953.
- Pyrrhocorax pyrrhocorax**, feeding behavior, food organisms, burnt ground, *Hepialus juveniles* 6827.
- Pyrrhocoris apterus**, juvenile hormones effects on corpora allata, metamorphosis 2711
saccharides metabolism, juvenile hormones effects on 6570
scent gland oils, biochemical analysis 3377.
temperature, effects on polymorphism, brachypterism, macropterism 7465.
- Pyrrhocoris operis**, growth regulators, precocene II, sensitivity, development, ovary 8225
- Pyrrhopygus**, host plants, flowering, life history adaptations, *Schinia mits* 6790
- Pyrrhopyge creni**, morphology, South America 4939.
- Pyrrhosoma nymphula**, avoidance behavior, predation, environmental conditions 1289.
- Pyronympha**, symbionts ultrastructure, flagella, bacteria 5172.
- Pyrus communis**, fruit trees, pests, life history, *Nippo lachnus piri*, India 4554
orchards, pest outbreaks, *Pseudococcus maritimus*, USA, Washington 8498
pests, effects on leaf fall, photosynthesis, *Bucculatrix pyrivorella* 7745.
- Pyrus communis** × **Pyrus ussuriensis**, host plants, pest resistance, *Psylla pyricola* 3720.
- Pyrus ussuriensis** × **Pyrus communis**, host plants, pest resistance, *Psylla pyricola* 3720.
- Pytho depressus**, functional morphology, mandibles, feeding behavior, larvae 4357.
- Quadraceps adustus**, new species, parasites, *Haematopodidae* 516.
- Quadraceps auratus**, parasites, *Haematopodidae* 516.
- Quadraceps juncus**, parasites, new records, *Vanellus vanellus*, Spain 8334.
- Quadraceps ridgwayi**, parasites, *Haematopodidae* 516.
- Quadrapsidiotus perniciosus**, pest control, parasites, *Prospaltella perniciosi*, Greece 2956.
sex pheromone, chemical composition, attractancy 1783.
- Quadriceps cedemajori**, host-parasite interactions, spatial distribution, *Charadrius obscurus*, *Thinornis novaezelandiae*, *Anarhynchus frontalis*, *Charadrius bincinus*, New Zealand 512.
- Quadriceps domineila**, host-parasite interactions, spatial distribution, *Charadrius obscurus*, *Thinornis novaezelandiae*, *Anarhynchus frontalis*, *Charadrius bincinus*, New Zealand 512.
- Quadriceps novaezelandiae**, host-parasite interactions, spatial distribution, *Charadrius obscurus*, *Thinornis novaezelandiae*, *Anarhynchus frontalis*, *Charadrius bincinus*, New Zealand 512.
- Quality control**, laboratory animals, population genetics, heterozygosity, *Chonstoneura occidentalis* 8658.
- Quantitation**, control programs efficiency, methodology, salt marshes, *Culicidae* 1351.
embryology, mitosis, *Calliphora erythrocephala* 1078.
infection, population characteristics, parasites, *Nosema apis*, *Apis mellifera* 1024.
- Quarantini virus**, isolation, characterization, vectors, *Hyalomma dromedarii*, Kuwait 5270
- Quasimoda**, toxicity, antifedants, larvae, *Locusta migratoria migratorioides* 2660
- Quaternary structure**, hemocyanin, biochemical analysis, *Eurytelma californicum* 3305
- Quedine**, taxonomic revision, USA, Oregon 2399.
- Quedius punctatellus**, association, *Proteinus longicornis*, Switzerland 7621
- Quedius repens**, new species, taxonomy, morphology, USA, Oregon 2399
- Queens**, age, effects on mortality, emergence, workers, *Apis mellifera* 8595
apiculture, honey production 7761
cannibalism, population regulation, colonies, *Hymenoptera* 1479
caste differentiation, diets effects on, *Apis mellifera* 376
castes, colonial characteristics, *Lasioglossum zephyrum* 7003
chemical extracts, *Apis mellifera*, effects on fecundity, *Tenebrio molitor* 8226
colonial characteristics, social structure, *Leptothorax nylanderi* 4648
colonial characteristics, *Solenopsis invicta*, USA, Texas, Madison Co. 9365
colonies, *Atta texana*, USA, Louisiana 3046
colonization, biochemical characteristics, *Solenopsis invicta* 5716
colonization, reproduction, *Polistes metricus* 2129
effects on aggregation behavior, chemical stimuli, *Myrmica rubra* 2267
effects on colonial characteristics, sex ratio, *Myrmica* 2279
effects on sex ratio, colonial characteristics, *Hymenoptera* 3043
effects on thermoregulation, metabolism, colonies, *Apis mellifera* 8590
effects on workers mating behavior, *Lasioglossum zephyrum* 2268
foundresses, colonization, dominance, egg laying, *Polistes fuscatus* 1893
introduction, apiculture, methodology, *Apis mellifera* 1415
juvenile hormones, plasma levels, *Apis mellifera* 3001
maintenance, storage, *Apis mellifera* 8547
morphology, *Ammicus decolor* 38
morphology, nests, *Schedorhynchus breinlii*, Australia 1482
mortality, sex ratio, workers production, *Apterostigma dentigerum* 3047
nest building, nesting behavior, *Dolichovespula saxonica* 4640
nest building, nesting behavior, *Vespa vulgaris*, *Vespa maculifrons*, *Vespa*
cosmobia 9164
pheromones, effects on castes, social behavior, *Apis mellifera* 3044
pheromones, effects on workers, survival, *Apis mellifera* 4647
population structure, colonial characteristics, workers, males, *Bombus perplexus* 9366
relatedness, population genetics, polygyny, *Myrmica rubra* 6280
sex pheromone, extracts, attractancy, workers, *Apis mellifera ligustica* 8272
- Queens, (continued)**
size, aberrants, colonial characteristics, apiculture, *Apis mellifera* 7731.
sterility, fertility, social organization, *Leptothorax provancheri* 2285.
storage, methodology, *Apis mellifera* 5339
swarming behavior, pheromones, effects on swarming behavior, *Apis mellifera* 746.
toxants effects on, colonies social behavior, *Solenopsis invicta* 1942.
toxants effects on, *Solenopsis invicta* 1942.
venom, phospholipase A₂, *Apis mellifera* 3431
Vespa maculifrons, *Vespa germanica*, *Vespa vulgaris*, *Vespa vidua*, nest
building, culture, laboratories 1983
workers, reproductive strategy, social organization, mathematical models,
Hymenoptera 3050
workers, social behavior, colonial characteristics, *Apis mellifera* 3051.
- Quercetta**, mutagenicity testing, lethality, *Drosophila melanogaster* 5475
- Quercus**, isolation, plant hosts, mortality, survival, *Gracillandae*, larvae 2135
- Quercus alba**, pest control, forests, *Enaphalodes rufulus*, USA, Ohio 2209
- Quercus coccinea**, pest control, forests, *Enaphalodes rufulus*, USA, Ohio 2209
- Quercus emoryi**, host plants, galls, abundance, *Torotrrips kosztarabi* 4422
- Quercus laevis**, host plants, life history, bionomics, *Brachys tessellatus*, USA, Southeast 1988
- Quercus nigra**, host plants, Cameroon, population density, population regulation 2134
- Quercus rubra**, pest control, forests, *Enaphalodes rufulus*, USA, Ohio 2209
- Quercus velutina**, pest control, forests, *Enaphalodes rufulus*, USA, Ohio 2209
- Quernapis**, instars, morphology, taxonomy, keys 1713
- Quinalphos**, insecticides, chemical control, efficacy, *Holotricha consanguinea* 7792
insecticides, chemical control, efficacy, *Orseolia oryzae*, *Scirpophaga incertulas* 7771
- Quinacilic acid**, pest control, *Phaeosolus vulgaris* 709
- Rabbits**, erythema skin lesions, parasites infestation, *Ixodes dammini* 8428.
otitis media, association, *Staphylococcus epidermidis*, *Psoroptes cuniculi* 5285
parasites effects on, anemia, *Amblyomma hebraeum* 673
parasites infestation, *Psoroptes cuniculi*, *Psoroptes ovis* 2179
susceptibility, ectoparasites transmission, *Psoroptes ovis*, *Ovis canadensis* 651
- Rabdozia**, toxicants, mitochondria inhibition, ovary, *Macrotermes subhyalinus* 2556.
- Rabies virus**, disease reservoirs, virulence, *Phloeoxodes rugicollis*, *Mustela* 7633.
vectors, *Vulpes*, *Phloeoxodes hexagonus*, *Phloeoxodes canisuga* 8414.
- Races**, chromosomes, population genetics, *Caledia captiva* 3111.
comparative studies, hemolymph carbohydrates, *Apis mellifera* 771.
honey production, correlation analysis, sugar plasma levels, *Apis mellifera* 5325.
ovary development, oviposition, *Apis mellifera* 4279.
population growth, abundance, fecundity, *Apis gossypii* 1306
population studies, ecological distribution, *Apis mellifera*, Oman 5216.
- Rachana circumdata**, new species, taxonomy, morphology, Philippines 4891
- Rachana circumdata panayensis**, new species, taxonomy, morphology, Philippines 4891
- Rachionotomys**, taxonomic revision, reclassification, Oriental Region 6394.
- Reclipsus ou**, larvae, seasonal variations, occurrence, host-parasite interactions, USA, Florida 1294.
nuclear polyhedrosis virus, pathogenicity, *Agrotis ipsilon* 3402.
nuclear polyhedrosis virus, pest control, *Agrotis ipsilon*, *Zea mays* 8454.
population density, surveys, pheromone traps, USA, Louisiana 8516.
- Radfordia affinis**, ectoparasites, *Mus musculus* 513.
- Radfordia enaifera**, ectoparasites, *Mus musculus* 513.
- Radfordiana**, synonymy, *Schoengastia*, Papua New Guinea 4763
- Radiation**, chemosterilants, sterilization, *Nephantis serinopa* 7458
damage, chromosomes, spermatozoa, DNA repair, oocytes, mutants, *Drosophila melanogaster* 6261.
diflubenuron, effects on sterility, *Anthonomus grandis* 1123.
effects on carbohydrate composition, hemolymph, *Musca domestica* 1753.
effects on hemolymph, *Anthonomus grandis* 5711.
effects on mating behavior, fecundity, competition, males, *Culex tarsalis* 1125.
oxygen, radiation development, embryos, *Drosophila melanogaster* 1120.
radioreistance, genetic factors, effects on oocytes, *Drosophila melanogaster* 2346
resistance, genetic factors, *Drosophila melanogaster* 7042.
sexual reproduction, longevity, progeny, *Pectinophora gossypiella* 2688.
sterilization, pest control, *Anthonomus grandis* 3486
survival, genetics, *Anthonomus grandis* 2296.
- y-Radiation**, mortality, temperature effects, *Pogonomyrmex owyhee* 1167.
- α-Radiation**, effects on morphology, anatomy, *Dacus cucurbitae* 5012.
effects on morphology, development, *Dacus cucurbitae* 2705.
effects on structure, histology, midgut, *Dacus dorsalis* 7359.
sterilization, effects on mating behavior, fertility, females, *Dacus cucurbitae* 7457.
- β-Radiation**, sterilization, honey contamination, *Streptococcus pluton* 8475
- γ-Radiation**, effects on development, larvae, pupae, *Dacus dorsalis* 7448
effects on hemolymph proteins, *Dacus dorsalis* 7358.

- γ Radiation, (continued)**
effects on peroxidase activity, *Dacus dorsalis* 7356.
effects on physical activity, membranes, *Dermetes vulpinus* 5133.
effects on triacylglycerol lipase activity, *Dacus dorsalis* 7355.
host plants, effects on attractancy, *Scolytus multistriatus* 8968.
sterilization, pest control, *Caryedon serratus* 7449.
- γ Radiation,**
effects on males copulation duration, *Lymantria dispar* 373.
effects on, wing discs, *Drosophila melanogaster* 1106.
- Radioactive labelling,**
parasites, *Theileria parva*, *Rhipicephalus appendiculatus* 3415.
- Radioassays,**
farnesic acid stimulation, juvenile hormones biosynthesis, corpora allata, *Diptera punctata* 208.
- Radiolabelled,**
dengue virus antigens detection, association *Aedes albopictus* 8166.
juvenile hormones, molting hormones, developmental stages, *Choleva angustata* 205.
measuring techniques, juvenile hormones, developmental stages, *Insecta* 2587.
molting hormones, larvae, *Sarcophaga bullata* 2717.
- Radiolabelled,**
cadmium, uptake, bioaccumulation, *Halobates neris*, *Halobates flaviventris* 936.
chromium, strontium, elimination, symbiosis, effects on, *Gromphadorhina porterosa*, *Gromphadorhina schaefferi* 8108.
iodine, trophallaxis, dispersal, localization, *Bifiditermes beesonii* 2554.
ion, elimination, eggs production, *Drosophila melanogaster* 366.
marking methodology, blood meals, *Phlebotomus* 6469.
strontium 90, control, sterilization, irradiation, survival, sex differences, *Glossina palpalis* 1470.
- Radioreistance,**
genetic factors, effects on oocytes, radiation, *Drosophila melanogaster* 2346.
genetic factors, germ cells, developmental stages, *Drosophila melanogaster* 2314.
genetic factors, genetic factors, chromosome 3, *Drosophila melanogaster* 2345.
- Radiosensitivity,**
chromosome aberrations, *Drosophila melanogaster* 8649.
mutants, chromosome aberrations, *Drosophila melanogaster*, radiosensitivity, mutants 8649.
- Rafacarus rafalski,**
new species, taxonomy, morphology, Brazil 3971.
- Railletia auris,**
pathology, effects on, *Bos indicus* 631.
- Railletia manfredi,**
ear ectoparasites, goats, Australia 650.
- Rain forests,**
chemical control, malathion, *Phlebotomus*, Panama 1831.
epidemiology, disease transmission, yellow fever virus, *Aedes africanus*, Ivory Coast 9230.
nests, distribution, density, *Agelena consociata*, Gabon 5213.
- Rainfall,**
effects on abundance, species diversity, leaf litter, *Arthropoda* 2883.
effects on population dynamics, *Anopheles aquasalis*, French Guiana 3689.
environmental effects, flight activity, *Cyclocephala* 1971.
- Rallus torquatus,**
hosts, parasites, *Trombiculidae*, Philippines 794.
- Ranicephalus olivaceus,**
new species parasites, *Ceriatogn olivaceum* 2628.
- Ranatra linearis,**
predatory behavior, visual stimuli, mechanical stimuli, molting 8295.
- Range,**
flight, capture-recapture studies, vectors, African trypanosomiasis, *Glossina fuscipes quanzensis*, Congo, People's Rep. 4490.
flight, disease transmission, *Culicoides varipennis* 2103.
flight, pollination, *Medicago sativa*, *Pitheus smaragdula* 7564.
foraging behavior, visual communication, dialects, *Apis mellifera carnica*, *Apis mellifera* 5118.
geographical distribution, *Caloptilia rufipennella*, British Isles 6314.
geographical distribution, habitat preferences, *Phylloreta striolata*, Canada, Saskatchewan 4335.
geographical distribution, introduced species, *Harpalus rufipes*, North America 3153.
geographical distribution, 7 families, *Heteromera*, Europe, Carpathian Mts. 8676.
host plants, geographical distribution, 10 species, pests, *Scirtothrips* 1261.
hosts, *Nilaparvata lugens*, *Leptocoris acuta*, infection, *Syncephalastrum racemosum*, *Penicillium oxalicum* 1815.
migrations, autumn, *Syrphidae*, Switzerland 9169.
parasites, reviews, *Leptinus*, North America 9498.
- Range extension,**
Culseta melanura, Canada, Newfoundland 6331.
geographical distribution, *Aleuropteryx juniperi*, USA 3944.
geographical distribution, *Bocharia*, USA, Texas 3171.
geographical distribution, *Halsysidota harrisi*, USA, Florida 5533.
geographical distribution, *Hylemyia fugax*, USA, Virginia 30.
geographical distribution, *Micromus timidus*, India 7111.
geographical distribution, new records, *Carabidae*, *Cinnulidae*, Canada, Newfoundland 8700.
geographical distribution, *Polygona comma*, Canada, Newfoundland 5523.
geographical distribution, records, *Plecoptera*, USA, Alaska 7019.
host-parasite interactions, *Catorhintha mendica*, *Mirabilis nyctaginea*, USA, East Coast 4397.
new records, *Apis mellifera adansonii*, Panama, Darien, Santa Fe 5537.
new records, *Chelostoma complanatum*, *Chelostoma fuliginosum*, USA, New York 2365.
new records, geographical distribution, *Acanalonia conica*, USA, Northeast 2367.
new records, geographical distribution, *Coelioxys bisonornis*, USA, Illinois 6327.
new records, geographical distribution, *Perizonia alchemillata*, Canada, Nova Scotia 7119.
new records, streams, *Taeniopteryx*, USA, Colorado 3165.
parasites, *Anopura*, *Acari*, *Rodentia*, Canada, Quebec 4386.
pesticides, *Ctenophthalmus felis*, *Corrodopsylla curvata*, *Megabothris abantis*, *Chaetopsylla tuberculiceps*, *Mammalia*, USA, Alaska 4743.
parasites, *Monopsyllus citianus*, *Hystriophylla dippei*, *spinata*, *Mammalia*, USA, Alaska 5530.
population studies, *Epidemia dorcas*, Canada, Ontario 9492.
Sphecomyia, *valida*, *Pyrrota undata*, *Boreothrinax maculipennis*, new records, geographical distribution, USA, Mississippi, USA, Arizona, USA, North Dakota 2366.
- Range management,**
pest control, pathogens, baiting, *Gryllidae* 1398.
- Rangelands,**
ecosystem analysis, pest control, reviews, *Insecta* 6212.
grazing, eggs persistence, *Hemileuca olivacea*, USA, New Mexico, Lincoln Co. 8575.
vegetation patterns, outbreaks, population density, species diversity, *Acrididae*, USA, Arizona 6050.
- Raphanus sativus,**
host plants, leaves, feeding, *Pieris brassicae* 6746.
roots, absorption, insecticides, parathion 7747.
- Rare species,**
Aegialia petrovitzi, taxonomy, morphology, Nepal 21.
check lists, *Microlepidoptera*, Sweden 4723.
Coleoptera, Netherlands, Voorne 1 6321.
endangered species, *Insecta*, British Isles 2118.
entomofauna, *Coleoptera*, Sweden, Halltorps Hage 4725.
geographical distribution, abundance, *Apterolupinus parvulus*, USA, California, Laguna 1 2288.
Microlepidoptera, Denmark 5515.
Neptulidae, Netherlands 6320.
new records, *Dorytomus salicinus*, British Isles, England, Cumbria 6298.
new records, geographical distribution, *Liodoria serricornis*, Sweden 4726.
new records, geographical distribution, *Macrolepidoptera*, Sweden 7086.
new records, *Orthetrum brunneum*, Austria, North Tyrol 7070.
new species, taxonomy, morphology, *Hyptiotes himalayensis*, India 3172.
nymphs, morphology, ecological distribution, *Lednia tunana* 42.
Platybunus strigosus, taxonomy, morphology 15.
population levels, *Strymonidia u-album*, British Isles 5998.
records, occurrence, *Xeromelasma interrupta*, USA, Illinois 6328.
species composition, *Xylophagidae*, *Empididae*, Czechoslovakia 7901.
surveys, *Aeschna viridis*, *Anaciaeschna isocles*, German Dem. Rep., Greifswald 4721.
wildlife conservation, *Invertebrata* 2147.
wildlife conservation, *Lepidoptera*, British Isles 2121.
wildlife conservation, *Lepidoptera*, British Isles, England 2119.
- Raspberry vein chlorosis virus,**
vectors, pathology, *Aphis idaei* 276.
- Rats,**
brain, synaptosomes, sodium channels, *Centruroides suffusus* neurotoxins effects on 8175.
brain, tityus toxin effects on biosynthesis, release, acetylcholine, *Tityus serrulatus* 8180.
parasites, new species, *Walchia tianguangshanensis*, China, People's Rep. 7.
- Rattus norvegicus norvegicus,**
parasites, species composition, *Arthropoda*, USSR, Kazakhstan 9144.
- Rattus rattus,**
hosts, disease reservoirs, *Rhodnius pallescens*, *Mammalia* 667.
parasites infection, medical importance, *Ceratophyllum fasciatum*, Nigeria 2933.
vitamin deficiencies, riboflavin, effects on parasitism susceptibility, *Polypax spinulosus* 6779.
- Ravinia byermieri,**
larvae, life history, predator-prey interactions, *Musca autumnalis*, mortality, feces 1314.
- Rayado fino virus,**
infection, salivary gland, *Dalbulus maidis* 5037.
- Raymondia,**
morphology, keys, geographical distribution, Philippines 871.
- RDNA,**
ribosomes, insertion sequences mobility, *Drosophila melanogaster* 3081.
- Rearing,**
artificial diets, amino acids composition, *Anastrepha obliqua* 4922.
artificial diets, development, *Leucania separata* 2493.
artificial diets, *Hylotrups bajulus* 8014.
artificial diets, larvae, *Wyeomyia smithii* 5625.
artificial diets, proteins, *Spirulina platensis*, *Bombus mori* 3239.
artificial diets, *Semidialia undecimnotata*, *Chrysopa carnea*, *Chrysopa perla*, *Chrysopa septempunctata*, *Chrysopa formosa* 6474.
artificial substrates, oviposition, *Gonia cinerascens* 6472.
comparison, survival, dispersal, *Trichoplusia ni* 1168.
contaminants, diets, bacteria, fungi, *Heliothis* 735.
culture systems, colonization, vectors, *Oeciacus vicarius* 3692.
development, *Corycia cephalonica* eggs, UV radiation, temperature effects on, *Trichogramma brassicae* 7450.
diets, *carrageenans*, nuclear polyhedrosis virus, yield, *Lymantria dispar* 8008.
diets, *Crocioloma bnotalis*, *Hellula undalis* 1746.
diets, food, artificial substrates, methodology, *Sabalodes aegrotata* 4084.
diets, *Geocoris punctipes* 169.
diets, nuclear polyhedrosis virus, pathogens, *Lymantria dispar* 3702.
dispersal, *Ceratitis capitata* 6136.
environmental effects, photoperiods, humidity, locomotor activity, flight activity, *Locusta migratoria migratorius* 4261.
extraction methodology, media (culture), pupae, *Diatraea grandiosella* 4087.
food sources, seeds collection equipment, *Onopeltus fasciatus* 8025.
habitat, larvae, *Chrysops*, USA, New Hampshire 2903.
harvesting methodology, automation, pupae, *Diatraea grandiosella* 8024.
host plants, effects on development, reproduction, *Dendroctonus ponderosae*, *Pinus* 5975.
host plants effects on, mating behavior, oviposition, *Dorycteria amatella* 1914.
hybridization, *Chrysocarus*, *Chrysocarus* 7051.
hyperparasitism, *Microterys flavus*, *Cheloneuron parala* 5185.
insects, biology, *Leptophor uniformis*, parasites, hosts, *Lygus hesperus* 2022.
laboratories, *Bruchomorpha oculata* 1717.
larvae, mortality, *Citheronia regalis* 7620.
life history, *Amplexus citrifolius* 6719.
life history, *Arzania densa* 3550.
life history, *Culex sitiens* 466.
life history, *Schirius cinctus*, *Cinctus*, USA, Illinois 8292.
light, methodology, *Insecta* 3241.
mating, pairing, methodology, *Culex pipiens fatigans* 8853.
media (culture), development, fecundity, *Corycia cephalonica* 7452.
media (culture), growth index, larvae, *Corycia cephalonica* 7467.
media (culture), parasites, *Bovicola caprae* 8337.
methodology, *Agrotis ipsilon* 3244.
methodology, *Anomala transvaalensis* 1962.
methodology, artificial diets, *Sabalodes aegrotata* 8019.
methodology, artificial substrates, nests, *Polistes* 1852.

Rearing, (continued)

- methodology, automation, larvae, *Dacus cucurbitae*, *Dacus dorsalis*, *Ceratitis capitata* 8020.
 methodology, colonies, *Lasiosglossum zephyrum* 4923.
 methodology, diets, *Colias eurytheme*, *Colias philodice* 7250.
 methodology, diets, *Diaprepes abbreviatus* 5147.
 methodology, diets, larvae, *Heliothis armigera* 6475.
 methodology, diets, *Lygus lineolaris* 8011.
 methodology, emergence, *Diptera* 7248.
 methodology, *Gryllidae* 5632.
 methodology, host plants, pesticide resistance, *Metasphaerium occidentale* 8863.
 methodology, host plants, *Pseudalacaspis pentagona* 1693.
 methodology, *Ixodes persulcatus* 8846.
 methodology, larvae, *Microperla*, British Isles, England 4919.
 methodology, life cycle, *Heteronychia arator*, *Heteronychia tenuistriatus* 8861.
 methodology, life history, *Cinara cronarti* 1682.
 methodology, nests, materials, *Megachile rotundata* 4921.
 methodology, nutrient requirements, production, *Nephotettix cinctipes* 856.
 methodology, parasites, *Bombus corrus* 6478.
 methodology, parasites, *Brachymeria lasus* 1701.
 methodology, pupae, *Simuliidae* 4915.
 methodology, toxicity tests, pesticides, *Amblyseius fallacis*, *Tetranychus urticae* 7387.
 mortality, *Argasidae* 8847.
 near polar polyhedrosis virus, virulence, biological control, *Insecta* 3828.
Oncocera volutus vectors, *Simulium danosum* 5058.
 oviposition cages, size effects on egg production, *Anthonomus grandis grandis* 8238.
 parasitoids, reproduction, hosts, *Stomoxys calcitrans*, *Spalangia cameroni* 5181.
 photoperiod, effects on dimorphism, pubescence, *Thyanta calceata* 5092.
 population dynamics, survival, development, *Spodoptera exempta*, Kenya 1310.
 population stability, source effects on, *Glossina pallidipes*, Kenya 574.
 simulation food meals, *Triatoma infestans* 2002.
 survival, development, *Blissus leucopertus* 65.
 temperature effects on emergence, pupae, *Megachile rotundata* 8230.
Rearing systems,
 automation, methodology, pests, *Diatraea grandiosella* 4093.
Reassociation,
 DNA, population genetics, interspecific hybridization, *Drosophila* 1557.
Receptacles,
 semen, reproductive organs, ultrastructure, histochemistry, *Glossina morsitans morsitans* 3455.
 seminal fluid, ultrastructure transformation, molting, *Thermobia domestica* 1076.
Receptivity,
 mating age, effects on, *Glossina pallidipes* 7423.
Receptors,
 acetylcholine, characterization, purification, *Musca domestica* 899.
 auditory perception, neurophysiology, electrical properties, *Cortex punctata* 4134.
 cells, scolopidium, development, tympanum, larvae, *Locusta migratoria* 8218.
 compound eyes, *Myrmica gulosa*, Australia 137.
 development, eggs, cortex, *Drosophila* 1079.
 gravity, sensilla, *Arenivaga* 2538.
 magnetic fields, orientation, communication, *Apis mellifera* 3302.
 mechanical stimuli, *Glossina* 2915.
 muscarine, characterization, *Drosophila melanogaster* 114.
 neurons, Octopamine, Limulus, *Periplaneta americana* 130.
 neurotoxins, development, neurons, *Scorpionidae* 8209.
 opioids, nervous system, *Leucophaea maderae* 2525.
 photoperiod, light penetration, cuticle, *Megoura viciae* 2533.
 sex pheromone, ultrastructure, *Musca domestica*, *Glossina morsitans* 974.
 temperature, antennal sensilla, *Stephomyces lucidus* 4979.
 temperature perception, ultrastructure, *Periplaneta americana* 146.
 temperature, ultrastructure, electrophysiological recording, *Rhipicephalus appendiculatus*, temperature 235.
 ultrastructure, electrophysiological recording, *Rhipicephalus appendiculatus* 235.
Reclaimed land,
 mines, recolonization, plant communities, *Arthropoda* 6048.
Reclassification,
 genera, *Cyprinidae*, Nearctic Region, Neotropical Region 7945.
 taxonomic revision, *Melittidae* 6436.
 taxonomic revision, phylogeny, *Microgasteria* 6437.
 taxonomic revision, *Rachionotomys*, *Tricholeptomyia*, *Tripteroides*, Oriental Region 6394.
 taxonomy, *Trichoprosopon* 6400.
Recognition,
 conspecifics, mate selection, *Polistes fuscatus* 6664.
 conspecifics, mating behavior, tactile stimuli, *Enallagma* 6669.
 flower-glands, stamens, conditioning, *Bombidae* 7501.
 males, mating behavior, antennal chemoreceptors, *Drosophila bipunctata*, *Drosophila melanogaster* 8231.
 odors, olfactory discrimination, nest mates, *Lasiosglossum zephyrum* 3359.
 pheromones, nests incompatibility, colonial characteristics, *Pseudomyrmex ferrugineus* 7799.
Recolonization,
 breeding sites, pest control, *Simulium danosum*, Ivory Coast 5269.
 fields, *Insecta*, USA, Arizona, *Sycamore* Creek 5432.
 reclaimed land, mines, plant communities, *Arthropoda* 6048.
 salt marshes, islands, biogeography, *Arthropoda*, USA, Florida Coast 5264.
Recombination,
 X chromosome, *Drosophila melanogaster* 7843.
 X chromosome, variability, sex linkage, genetic variance, *Drosophila melanogaster* 5461.
 chromosomes, age effects on, males, *Drosophila ananassae* 5463.
 DNA repair, X radiation, *Drosophila melanogaster* 3063.
 factors, males, characterization, *Drosophila melanogaster* 2315.
 frequency, X chromosome mutation, markers, *Drosophila melanogaster* 3104.
 genetic factors, sex determination methodology, automation, *Ceratitis capitata* 8009.
 genetics, inbreeding, *Drosophila melanogaster* 7032.
 heterochromatin, gametes, *Drosophila melanogaster* 3071.
 inversion loci, linkage disequilibrium, *Drosophila melanogaster* 2313.
 mitosis, mutation, patterns duplication, compartmentation, *Drosophila* 1522.
 mutants, genes, *Drosophila melanogaster* 7854.
 variability, temperature effects on, *Drosophila melanogaster* 5449.

Records,

- distribution, *Phenacoccus manihoti*, Africa 1194.
 geographical distribution, *Ceratitis nemata*, Asia, Australia 1581.
 geographical distribution, *Culicidae*, *Anopheles*, Niger 628.
 geographical distribution, *Gasteropoda*, Austria 4733.
 geographical distribution, identification keys, *Trypoxylon*, Australia 1582.
 geographical distribution, occurrence, *Thymelicus lineola*, Canada, Manitoba 3159.
 host plants, herbivores, species composition, *Phyllocolpa*, British Isles 5965.
 hosts, *Chrotopera*, *Whartonia oweni*, Tanzania 6344.
 introduced species, *diutyoletia*, *Lepidoptera*, *Diptera*, Ireland, 4705.
 occurrence, geographical distribution, aquatic environment, *Simulium defoliartu*, *Prosimulium ochrodactylum*, USA, California, San Geronimo Mts 1572.
 pests, occurrence, egg production, *Leptotarsus decemlineatus*, British Isles 1440.
 range extension, geographical distribution, *Plecoptera*, USA, Alaska 7019.
 rare species, occurrence, *Xeromela interrupta*, USA, Illinois 6328.
 species composition, *Coleoptera*, Finland 7897.
 species composition, zoogeography, *Hebertella*, *Auchenorhynchus*, Norway 7898.
 taxonomy, morphology, *Lepidoptera*, Spain, Guadalajara 7080.
Recovery,
 environmental degradation, water springs, agecomposition, *Gumaga nigricula*, USA, California 7812.
 fires, chaparral, succession, community composition, *Insecta*, USA, California 5246.
 pathogens, biological control, *Bacillus thuringiensis*, *Spodoptera littoralis* 1011.
Recruitment,
 food sources, chemical communication, pheromones, *Tetramorium impurum* 3840.
 herbivores effects on, *Haploporus squarrosus*, *Insecta*, USA, California 6783.
 pheromones, polythetic behavior, *Nasutitermes corniger* 6685.
 workers, feeding behavior, trail pheromone, *Myrmica rugulosa* 4348.
 workers, foraging behavior, pheromones, *Myrmica rugulosa* 5169.
Rectal gland,
 secretions, chemical composition, *Dacus cucurbitae* 8114.
 sex discrimination, aggregation behavior, *Megarrhyssa* 1481.
Recycling,
 pasture, dung, economic importance, introduced species, *Geotrupes*, USA 4654.
Reduviidae,
 digestive tract, functional morphology, histology 158.
 overwintering behavior, ecological distribution, USA, South Carolina 455.
 salivary gland, anatomy, histology, secretions 252.
 treatment, bites, stings 629.
Reduvius americanus,
 predators, eggs, mortality, *Empoasca fabae* 6046.
Reduvius rufipes,
 predator-prey interactions, *Pseudophasma includens* 587.
Regeneration,
 antennae, electrical stimulation effects on, *Liobobus forficatus* 1090.
 axons, *Periplaneta* 346.
 feeding damage, host plants, *Insecta*, *Nymphodes cristatus* 6801.
 flight cells, seasonal variations, life history, *Lissorhoptrum oryzophilus* 1732.
 gills, *Cloosia cognatum* 1950.
 imaginal discs, patterns, genetics, *Drosophila* 4252.
 leg. cells interaction, *Insecta* 4251.
 mesenteric epithelium, cell division, *Entomobryomorpha* 7436.
 motor neurons, leg. muscles, octopamine receptors, *Periplaneta americana* 8912.
 neurons, axons, muscles, *Teleostei*, *oceanicus* 2530.
 physiology, *Periplaneta americana* 5071.
 supernumerary antennae, *Blattella craniifer* 7430.
 wing discs, fragments, *Drosophila* 3467.
 wing discs, regulation, *Drosophila melanogaster* 344.
 wing discs, sequence, *Drosophila* 3469.
Regulation,
 body size, larvae development, *Blattella germanica* 2720.
 corpora allata, hormones, reproduction, *Diploptera punctata* 3494.
 digestive tract, enzymatic activity, *Periplaneta americana* 2548.
 feeding behavior, sucrose effects on, *Schistocerca gregaria* 493.
 gene expression, embryos, development, chorion, *Saturmidae* 3884.
 genes transcription, *Drosophila* 3061.
 imaginal discs differentiation, *Drosophila* 335.
 juvenile hormones, ovary effects on, *Aedes aegypti* 2583.
 metabolism, ecdysteroids, *Insecta* 3344.
 nucleolus organizer region, hybrids, *Drosophila mulleri* 3059.
 ovary, brain neurosecretion, *Acheta domesticus* 984.
 pheromones production, *Apis mellifera* 212.
 reproduction cycles, photoperiod, temperature, *Armadiellidium vulgare* 7446.
 vitellogenesis, genetic factors, hormones, *Drosophila* 5095.
 wing discs regeneration, *Drosophila melanogaster* 344.
Reinforcement,
 learning behavior, extinction, response acquisition, *Melipona quadrifasciata* antithodes 6688.
 nectar, effects on foraging behavior, *Bombus sandersoni*, *Vespa vulgaris* 2049.
Relative humidity,
 effects on development, *Chilo auriculus* 9050.
 effects on feeding behavior, *Lucilia sericata* 7506.
 effects on larvae survival, *Epilachna varivestis* 6005.
 effects on survival, fecundity, *Pauridia peregrina* 7504.
 environmental conditions, infestation, stored products, *Triticum*, *Acarus siro*, *Acarus farris*, *Aeroglyphus robustus*, *Lepidoglyphus destructor*, *Tyrophagus putrescentiae* 4513.
 environmental effects, food consumption, food, pests, *Hydrolytus bajulus* 2000.
 environmental effects, locomotor activity, flight activity, *Locusta migratoria* migratoroides 2541.
 environmental effects, survival, pests, *Copidosoma koehleri* 1935.
 temperature, environmental effects, development, mortality, *Corycia cephalonica* 1127.
 temperature, environmental effects, survival, fecundity, *Epilachna varivestis* 1166.
 weather, flight activity, *Dendroctonus frontalis* 1169.
Release,
 histamine, allergens, man, *Dermatophagoides farinae* 1372.
Release factors,
 copulation, physical characteristics, *Plodia interpunctella*, *Cadra cautella*, *Anagasta kuehniella* 408.
Remote sensing,
 methodology, defoliation, pests, *Datana integerrima* 8855.

Removal.

compound eyes, effects on compound eyes orientation, Acrididae 149
 host plants, wind, *Tetranychus neocaledonicus* 775
 larvae, workers, disease resistance, brood disease, *Apis mellifera* 5859
 ovary, effects on brain neurosecretion, *Achea domesticus* 984
 wings, effects on biochemical characteristics, crop, *Solenopsis geminata*,
Solenopsis richteri 1754

Renal function.

excretion, fluids transport, Malpighian tubules, reviews, *Insecta* 8931.

Reovirus.

detection, characterization, *Drosophila melanogaster*, *Ceratitis capitata* 1025

Repeated sequence.

DNA, genetic variance, species, *Drosophila* 8639.
 DNA, hybridization analysis, Y chromosomes, *Drosophila hydei* 9386
 DNA nucleotide sequence, transposon mdg3, *Drosophila melanogaster* 9382
 nucleotide sequence, DNA, *Drosophila melanogaster* 7822
 rRNA genes, evolution, *Drosophila melanogaster* 8657
 transposon 412, DNA nucleotide sequence, *Drosophila melanogaster* 9381.

Repellency.

stored products repellents, comparative studies, *Insecta* 711.

Repellents.

aerosols, efficacy, pest control, *Atrichopoda* 8965.
 antifeedants, chemical composition, mimicry, *Metriorchyris rhipidius* 1785
Azadirachta indica extracts, pest control, *Amsacta moorei*, *Vigna aconitifolia*
 6923
 chemical analysis, esters, mandelic acid, *Tribolium confusum* 222
 chemical, efficiency, assays, *Rhizocleptus evereti evereti* 1369.
 comparative studies, vectors, disease transmission, simuliidae, Brazil, Amazon
 Basin 1364.

diethyltoluamide, ethyl hexanediol, pest control, *Damanus montanus* 6887

effects on viruses disease transmission, host plants, *Myzus persicae* 6979.

efficacy, *Ixodes ricinus* 4578

efficacy, pest control, *Diptera* 8961

efficacy, pest control, *Simulium* 313

electronic comparison, efficacy, *Aedes* 8424

Formicidae, defense mechanisms, colonial characteristics, *Polistes fuscatus* 6984

host plants, host searching behavior, *Cavendishia aegopodu* 2056

oviposition, fatty acids, *Culex* 5859

pest control, buildings, *Drosophila* 5378.

pest control, clothing, *Atrichopoda* 8962

pest control, *Dysdercus koenigii* 7340

pest control, stored products, *Rhizopertha dominica*, *Tribolium castaneum* 7729

pest control, thiamine, *Canis familiaris*, *Siphonaptera* 7636

silk, interspecific relationships, *Dicyna*, *Mallos* 3839

stored products pests, repellency, comparative studies, *Insecta* 711

Replication.

biological control, nuclear polyhedrosis virus, granulosis virus, *Insecta* 3394.

chromosomes, brain cells, larvae, *Drosophila nasuta* 4678.

chromosomes, stability, mutation, *Drosophila melanogaster* 7037.

DNA, termination? DNA polymerase I, *Drosophila melanogaster* 7831

Heliothis zea nuclear polyhedrosis virus, cell lines, biological control,

Heliothis 3414

nuclear polyhedrosis virus, temperature effects on, *Bombyx mori* 1821.

Oryctes baculovirus, cell culture, *Heteronychia arator*, *Spodoptera frugiperda*,

Aedes albopictus 880.

polytene chromosomes, salivary gland, *Drosophila nasuta* 4677.

viruses, media (culture), TC-199-MK, cell lines, *Insecta* 8852.

viruses, reviews, *Insecta* 8990

Reproduction.

new records, *Nomia triangulifera*, USA, Illinois 9497.

new records, *Xeroneclea interrupta*, USA, Illinois, Henderson Co. 9493.

pest control, pesticide applications, *Nilaparvata lugens* 6122.

Reproduction.

accessory gland, ablation, hatchability, fertility, females, *Cochliomyia*

hominivorax, *Stenomys calctrans* 1853.

accessory gland role, spermatogenesis, blood meals, *Stenomys calctrans* 8241.

activity patterns, mortality, plantations, *Pissodes strobi* 2161

adaptations, herbivory damage, *Lepidoptera* larvae, *Jurinea mollis* 9164.

adults body size effects on, *Orthopagus gazella* 2897.

aggregation, phenology, *Euploea cora corinna*, Australia 7581.

antibiotics effects on, *Heliothis subflexa* × *Heliothis virescens* 3501

artificial diets, DIMBOA, effects on, *Ostrinia nubilalis* 9306.

biology, comparison, plant hosts, *Phyllosticta citrella* 551

blood meals simulation effects on, rearing, *Triatoma infestans* 2002

Blumea eriantha oil vapors effects on, *Earias viatica* 7454.

castes, colonial characteristics, *Cataglyphis curvis* 7002

castes, colonial characteristics, *Lasius sakagami* 7000.

castes, ergatoids, colonial characteristics, *Nasutitermes corniger* 6998.

castes, social pair, colonial characteristics, *Macrotermes michaelseni* 8591.

colonial characteristics, castes, *Coptotermes* 6217.

colonial characteristics, electric fields effects on, power lines, *Apis mellifera*

7570

colonies, diflubenzuron effects on, *Apis mellifera* 6622.

colonies, food availability effects on, *Coptotermes formosanus* 4646.

colonies, polygyny, monogyny, *Myrmica rugulosa*, Japan, Sapporo 3843.

competition, sterilization, *Diatraea grandiosella* 3490.

cycles, regulation, photoperiod, temperature, *Armadijidium vulgare* 7446

development, life history, *Philonthus longicornis* 6726.

development, life history, *Philonthus turbidus* 6709.

development, oviposition, longevity, *Blissus leucopertus*, effects on, host

plants, grasses, damage, photoperiods 536.

diets effects on, *Isotoma viridis* 4268.

diets effects on, sterols, *Diatraea grandiosella* 3490.

diflubenzuron effects on, *Oryza japonica* 5767.

distribution, abundance, *Aedes*, *Nigeria* 2150.

effects of diets, *Dacus oleae* 1109.

effects on, pathology, biological control, *Bacillus thuringiensis*, *Lepidoptera*

997

electrical currents effects on, power lines, colonies, *Apis mellifera* 1866.

fecundity, diets effects on, *Cyphoderus javanus* 5090.

fecundity, life history, *Pectinophora scutiger* 3549.

fitness, temperature, carboxylic-ester hydrolase, alleles, males, *Drosophila*

melanogaster 7474.

food organisms nutritive value effects on, *Myzus persicae*, *Aphidoletes aphidimyza*

5678.

food preferences, chemoreception, salts, females, *Phormia regina* 7296.

Reproduction. (continued)

growth regulators effects on, pest control *Pissodes strobi* 3791.

growth regulators, morphometry, females, *Culex pipiens*, effects on 360.

growth, temperature effects, *Lobesia botrana* 352.

Hister coenosus, *Hister incertus*, laboratories 1989.

host plants effects on, rearing, *Dendroctonus ponderosae*, *Pinus* 5975.

host plants environmental stress effects on, *Medicago sativa*, *Therioaphis*

nuculata 9168

infection effects on, pathogens, *Vairimorpha necatrix*, *Ostrinia nubilalis* 8168.

insecticides, effects on, *Nilaparvata lugens* 306.

juvenile hormones, enzyme activity, *Diptera punctata* 6657.

life cycle, blood meals, dispersion, *Aedes cataphylla* 6712.

life cycle, *Choristoneura occidentalis*, USA, Washington 7519.

life cycle, environmental effects, *Brunchidius alferi* 6653.

life cycle, *Gerris*, Austria 7809.

life cycle, *Ips typographus*, *Ips amitius*, *Pityogenes chalcographus* 6715.

life cycle, pest control, *Hyalemya aucta* 6143

life cycle, *Pterostichus panzeri*, Austria 6706.

life cycle, *Ruspolia differens* 7526.

life history, host plants, *Bans acitborax*, *Portulaca oleraceae* 6809.

life history, host plants, *Hypurus bertrandi*, *Portulaca oleraceae* 6728.

life history, parasites, *Aleochara moesta*, *Musca domestica* 6775.

life history, *Philonthus musor* 6708.

life tables, *Tetranychus urticae* 3555

longevity, diets effects on, food organisms, *Amblyseius gossipi* 7603.

longevity, life history, *Bedellia somnulentella* 6727.

longevity, parasitism effects on, *Trichopoda pennipes*, *Nezara viridula* 5936.

matting behavior, copulation, *Imparipes hirsuticornis* 6670.

methoprene effects on, *Dendroctonus frontalis* 383.

milk production glands, histochemistry, *Melophagus ovinus* 3389.

molt, hibernation, feeding behavior, *Lagynochobius hygricus* 5251.

morphology, juvenile hormones effects on, population studies, *Eurygaster*

interpunctatus 6648.

mutation, weightlessness, *Tribolium castaneum* 1108.

nest building, oviposition, temperature effects, population density, female body

size, emergence, effects on, *Dendroctonus frontalis* 1879.

oogenesis, corpora allata regulation, hormones, *Diptera punctata* 3494.

parasites, *Babesia* spp., *Rhipicephalus* 3484.

parasites, diflubenzuron effects on, *Biosetia longicaudatus*, *Anastrepha suspensa*

357.

parasites effects on, colonies, *Mastophora crustosa*, *Nasutitermes corniger*,

Nasutitermes ephrae 4193.

parasites, *Eutrichopodopsis nitens*, *Nezara viridula* 6770.

parasites, *Spalangia cameroni* 9141.

parasitism effects on, *Nosematidae*, *Chilo sacchariphagus* 9009.

parasitoids, hosts, *Spalangia cameroni*, *Stenomys calctrans* 5181.

parasitoids, *Telenomus podisi*, *Trissolcus euschisti* 8322.

parthenogenesis, population studies, *Aphis nasturtii* 3557.

parasites effects on, biological control, *Nosema algerae*, *Anopheles stephensi*

739.

pests, breeding sites, host plants, *Scolytus multistriatus*, *Ulmus procera* 6195.

photoperiods, effects on, fertility, juveniles males, *Anagasta kuehniella* 1880.

physiology, seasonal variations, diapause, *Epilachna varivestis* 349.

physiology, winter, *Anthonomus grandis* 3558.

pollination, *Asarum caudatum*, *Diptera* 6786.

pollinators, foraging behavior, *Cochlospermum vitifolium*, *Centris*, Panama 6787.

pollution effects, exhausts, *Apis mellifera* 1940.

Polyscias guilfoylei extracts effects on, biochemical characteristics, *Dysdercus*

cingulatus 6650

population density, dung dispersal, *Orthopagus binodis* 7609.

population dynamics, *Culex pipiens*, Africa 1316.

population growth, colonial characteristics, mathematical models, *Myrmica* 3049.

population growth, pests, *Cerculia elaphas*, Hungary 7703.

proteins, diets, *Dysdercus koenigii* 7480.

queens, colonization, *Polistes metricus* 2129.

sex ratio, colonial characteristics, queens effects on, *Myrmica* 2279.

soil temperature effects on, *Pectinophora gossypiella* 6167.

sterols effects on, *Glossina morsitans* 355.

stored products pests, *Sitophilus oryzae*, *Tribolium castaneum*, *Oryza sativa* 7679.

survival, host plants, *Rhopalosiphum padi*, *Prunus* 2838.

Telenomus californicus, parasites, hosts, *Orygia pseudosugata* 2015.

temperature effects on, *Chelindea vittiger* 6644.

temperature effects, paralysis, *Anthonomus grandis* 1105.

rehalase activity, *Dysdercus koenigii* 8941.

vectors, parasites, *Babesia bigemina*, *Boophilus decoloratus* 6025.

vitellogenesis, *Thermobia domestica* 6656.

Reproductive behavior.

calling behavior, *Chrysopa oculata*, *Chrysopa* ch 5853.

chemical stimuli, odors, oviposition, *Lucilia cuprina* 1917.

colonial characteristics, aggression, castes, *Monomorium pharaonis* 3838.

colonial characteristics, life cycle, *Eriophora bistrata* 473.

copulation, spermatozoa, *Nezara viridula* 398.

egg production, fertility, fecundity, *Dendroctonus frontalis* 1150.

environmental effects, oviposition, *Lipeurus laevigatus* 4258.

enzymatic activity, esterase 6, *Drosophila melanogaster* 1889.

fecundity, longevity, *Toxorynchites amboinensis* 439.

females, attractants, *Lucilia cuprina* 215.

interspecific relationships, natural selection, *Pteropyx*, *Afrocimex*, *Xylocoris*

1152

life cycle, parasites, *Goniozus emigratus*, *Paramyelois transitella* 6754.

life history, *Dasyproctus westermanni*, South Africa 471.

life history, longevity, 462.

life history, *Mastophora dizzydeni* 1949.

life history, population dynamics, *Lycosa pseudoannulata*, China, People's Rep.

5879.

longevity, fecundity, *Nezara viridula* 6629.

males, sex pheromone effects on, *Sitotroga cerealella* 424.

Mastophora, South Africa 470.

mate selection, spatial distribution, males, *Cystosoma saundersi* 2748.

mathematical models, sexual behavior, populations, *Chaulionathus pennsylvanicus*

1148.

oviposition, bionomics, *Stator pygidialis* 5102.

oviposition, fecundity, host plants, *Athenegona soccata* 5842.

oviposition habitat preferences, *Maruca testalis* 433

oviposition, host plants, *Chilo partellus*, *Zea mays* 7492.

oviposition, host plants, *Hesperia ottoe*, *Echinacea pallida* 8246.

Reproductive behavior, (continued)

- oviposition, host selection, fecundity, parasitoids, *Euplectrus kuwanae* 2742
 oviposition, host specificity, *Dryinidae* 401
 oviposition, life cycle, *Simulium fulvum* 4330
 oviposition, population dynamics, parasites, *Euplectrus plathypenae* 1149
 oviposition, sex linkage, inheritance, *Callosobruchus maculatus* 5483
 reproductive isolation, acoustic communication, *Schizocosa ocreata*, *Schizocosa roseni* 3541
 resource allocation, aggressive behavior, environmental factors, assessment strategy, *Scatophaga stercoraria* 1143
 sex pheromone effects on, *Cochliomyia hominivorax* 221
 sex pheromone effects on, communication disruption, *Grapholita molesta* 415
 territorial behavior, *Anthidium manicatum* 1177
- Reproductive effort,**
 energetics, sex differences, *Cystosoma saundersi* 9063
 parasitoids, *Xanthopimpla stentator*, *Chilo partellus* 8315
- Reproductive isolation,**
 allozymes, differentiation, chromosomes, polymorphism, *Caleda captiva* 3924
 calling behavior, sound production, *Nephotettix cinctipes*, *Nephotettix*
obscurus, *Nephotettix nigropictus*, *Nephotettix malayanus* 7498
 evolution, speciation, male selection, *Drosophila melanogaster* 3929
 genitalia, morphology, geographical variations, Males, *Drosophila teissleri*,
Gunea, *Rhodesia* 1552
 hybridization, sympatric populations, *Ostrinia* 7050
 mating behavior, courtship, *Aponomma hydrosau*, *Amblyomma albolimbatum*,
Amblyomma limbatum 1494
 mating behavior, courtship, *Drosophila mojavensis*, *Drosophila anzenbergeri* 402
 mating behavior, feeding types, *Dichocrocis punctiferalis*, *Japan* 1912
 mating behavior, sympatric populations, *Ostrinia* 6659
 population genetics, *Drosophila immigrans*, Australia, Melbourne 5490
 population genetics, enzymatic activity, *Phlebotomus perilluwi*, *perilluwi*, Italy
 1133
- reproductive behavior, acoustic communication, *Schizocosa ocreata*, *Schizocosa*
roseni 3541
 song, geographical variations, *Muelleriella* 8266
 strains, competition, population density, *Drosophila melanogaster* 1545
 sympatric populations, *Callosamia* 5247
 sympatric populations, life history, *Echenopora* 6856
- Reproductive organs,**
 accessory gland, development, juvenile hormones, females, *Schistocerca gregaria*
 2672
 accessory gland, development, *Schistocerca gregaria* 5062
 anatomy, females, *Gonia cinerascens* 2669
 anatomy, histology, physiology, *Parastacus armatus* 9033
 anatomy, identification, *Xestia dolosa*, *Xestia alba*, Canada, Ontario 2667
 cytology, chemosterilants effects on, *topa*, *Dysdercus cingulatus* 5085
 development, juvenile hormones effects on, *Danaus plexippus* 2713
 growth, juvenile hormones effects on, *Danaus plexippus* 4275
 histology, mutants, intersexes, *Drosophila melanogaster* 5064
 hosts, parasitoids infestation effects on, *Aphidius smithi*, *Acyrtosiphon pisum*
 6774
 infection, parasites, new species, *Nosema calcarati*, *Ptyogenes calcaratus* 9002
 juvenile hormones effects on, *Danaus plexippus* 5094
 morphogenesis, precocene II effects on, *Corycia cephalonica* 7425
 morphology, *Athergona soccata* 4434
 morphology, *Leucania separata* 4243
 morphology, males, phylogeny, *Formicidae* 3456
 prostaglandins, pheromone emission, *Trichoplusia ni* 8097
 secretions, color, age effects, mating, *Spodoptera littoralis* 2707
 semen receptacles, ultrastructure, histochemistry, *Glossina morsitans morsitans*
 3455
 smooth muscles, contraction, 5-hydroxytryptamine, proctolin, *Tabanus proximus*
 965
 spermatheca, anatomy, histology, *Gesonia punctifrons* 328
 ultrastructure, role, sex determination, parthenogenesis, *Diadromus pulchellus*
 3504
- Reproductive status,**
 age composition, population studies, *Tabanidae* 9206
 Caribbean, New Zealand, Banks Peninsula 6845
 corpora allata, ovary development, hierarchy, foundress, *Polistes gallicus* 5060
 fecundity, temperature, salinity effects on, *Aedes dorsalis* 8223
 sex ratio, *Earias insulana*, Israel 9175
- Reproductive strategy,**
 colonial characteristics, *Nasutitermes corniger*, Panama 3845
 emergence, protandry, *Lepidoptera* 5885
 energetics, activity, *Collembola* 6843
 habitat adaptations, littoral zone, freshwater environments, *Scatella picea* 6861
 host plants, pollination, *Ceratostolen*, *Ficus* 6781
 life history, energetics, egg production, *Gargaphia solani* 5911
 life history, mathematical models, *Drosophila* 2785
 life history, resource allocation, *Heliconidae* 468
 nesting behavior, mating behavior, parental behavior, *Pachodynerus nasidens* 6662
 population dynamics, *Syneca surinamensis* 5222
 population genetics, divergence, temperate environment, tropical environment,
Drosophila melanogaster 7057
 population genetics, host plants, pollination, *Insecta* 3592
 population growth, *Willowia nigromaculata* 6862
 population studies, *Glossina morsitans morsitans* 7614
 sex ratio, parasitoids, host body size effects on, *Heterospilus pruinosipidis* 7538
 social organization, mathematical models, *Hymenoptera* 5050
- Reproductive success,**
 host plants, pollination, *Ficus glabrata*, *Agave* 2051
- Reproductive system,**
 physiology, *Periplaneta americana* 5099
- Reproductive systems,**
 anatomy, development, *Musca domestica* 9046
 anatomy, mating behavior, age, *Anopheles stephensi* 9073
 development, blood meals, *Mansonia richiardii* 9058
 development, magnesium, food intake, larvae, *Scotia segetum* 7442
 genital tract, anatomy, function, constrictions, *Calpodes ethius* 9038
 gonotrophic cycles, *Aedes malayensis*, *Aedes polynesiensis* 1854
 morphology, females, *Gonia cinerascens* 6611
 reproductive behavior, enzymatic activity, esterase 6, *Drosophila melanogaster*
 1849
 reproductive organs, semen, *Leucania separata* 4243
 steroids biosynthesis, *Periplaneta americana* 6635

Reptiles,

- feces, attractancy, *Scarabaeinae*, Panama 5134
 parasites, geographical distribution, *Amblyomma*, *Aponomma*, Australia 3584
- Requirements,**
 calcium, skeletal muscle fibers, action potential, *Carassius morosus* 1111
- Research programs,**
 disease control, malaria, vectors, *Anopheles* 9267
 environment management, pest control, planning, *Insecta* 3809
 pest control, U.S. Department of Agriculture, evaluation methodology, USA 7923
 pest control, control programs, *Athergona soccata* 4556
 pest control, crops, *Acrididae*, West Africa 681
 pest control, pheromone traps, *Agrotis ipsilon*, USA 8574
 pests - control programs, *Athergona*, Sudan 4562
 resource management, forestry, pest control, *Insecta* 5323
- Reservoirs,**
 abundance, seasonal variations, *Chironomidae*, USA, Florida 8609
 pest control, water management, *Culex*, USA, Tennessee 2935
 population dynamics, *Aedes*, USSR, Armenia, Sayany Reservoir 9374
- Residual effects,**
 growth regulators, pests, stored products, *Rhyzopertha dominica*, *Sitophilus*
oryzae 8572
- Residues,**
 apiculture, antibiotics, honey, larvae, *Apis mellifera* 2243
- Resistance,**
 age effects, infestation, *Solanum tuberosum*, *Empoasca fabae* 3597
 anethia, chromosomes, biochemical analysis, lipids, *Drosophila melanogaster*
 3447
 antibiotics, milbemycin, *Tetranychus urticae* 1838
 cultivars, pests, *Vigna unguiculata*, *Lygus lineolaris*, *Ancarsia*, *gemmatilis*,
Nezara viridula, *Chalcidomorpha*, *Aeneus*, *Aphis* 4614
 diseases, ulcivulva effects on, *Pinus strobus*, *Cureulionidae* 1393
 ectoparasites, control, cattle hybridization, *Haemaphysalis longicornis* 649
 food consumption, herbivores, *Zea mays*, *Spodoptera eridania* 4602
 fumigants, metabolism, methyl bromide, *Sitophilus granarius* 1061
 galls, host plants, *Picea excelsa*, *Chermes abietis* 7562
 host plants, antifeedants, *Corchorus capsularis*, *Myliococcus discolor* 2851
 host plants, leaves, feeding behavior, *Enophyes cladophyllus*, *Solanum dulcamara*
 1236
 host plants, pest control, *Medicago sativa*, *Acyrtosiphon kondoi*, *Acyrtosiphon*
pisum 3801
 host plants, pests, *bionomics*, *Medicago sativa*, *Therioaphis trifolii* 7757
 host plants, pests, *Cylas formicarius*, *Ipomoea batatas* 1233
 host-parasite interactions, *Clavia*, *Amblyomma americanum* 1232
 infestation, *Isodidae*, *Mammalia* 2926
 insecticides, diflubenzuron, bioaccumulation, localization, tissues, *Pteris*
brassicae 1059
 mechanisms, pesticide resistance, *lindane*, *Musca domestica* 1849
 pathways, deficient mutant gene expression, *Drosophila melanogaster* 3879
 pests, antibodies, *Eimeriella ophioides*, *Spodoptera frugiperda* 4406
 phosphene fumigants, pest control, *Rhyzopertha dominica* 1044
 phytochemical, chemical control, larvae, *Tribolium castaneum* 1046
 radiation, genetic factors, *Drosophila melanogaster* 7042
 sterility factors, genetic control, *Drosophila melanogaster* 3121
 sulfur, inheritance, population genetics, *Metasphenus occidentalis* 5493
- Resmethrin,**
 insecticides, aerosols, chemical control, *Anopheles quadrimaculatus*, *Culex*
quinquefasciatus 6093
 repellents, efficacy, *Simulium* 313
- Resource allocation,**
 feeding, survival, males, gynopares, *Rhopalosiphum padi* 5919
 reproductive behavior, aggressive behavior, environmental factors, assessment
 strategy, *Scatophaga stercoraria* 1143
 reproductive strategy, life history, *Heliconidae* 468
- Resource availability,**
 oviposition, population density, males, breeding success, *Scatophaga stercoraria*
 6857
- Resource management,**
 forestry, pest control, *Insecta* 9351
 forestry, research programs, pest control, *Insecta* 5323
 integrated control, development, socio-economic aspects 5385
- Resource partitioning,**
 feeding behavior, predation, *Notonecta*, British Isles 2904
 foraging behavior, colonies, *Pogonomyrmex* *ovyehei*, USA, Idaho 5915
 functional morphology, proboscis, community structure, *Bombus*, Europe, North
 6841
 host plants, habitat, phenology, *Muelleriella* 3633
 oviposition, pheromones, deterrents, intraspecific relationships, *Dacus*
cucurbitae 5850
 population dynamics, competition, pools, *Arctocoris carinata*, *Callicorixa*
producta 6004
 Silphidae, Canada, Ontario 9209
- Resource utilization,**
 activity patterns, sympatric populations, *Leptomymex*, *Leptomymex fragilis* 2900
 coexistence, dung, guilts, *Aphodius* 9211
 foraging behavior, niche breadth, castes, *Bombus*, Sweden 4480
 sympatric populations, feeding, *Drosophila megagenys*, *Drosophila notha*, Australia
 3400
- Respiration,**
 diapause, temperature effects, *Argiope aurantia* 1097
 environmental impact, grazing, nutrient release, fungi, *Onychiurus subtenius*
 2796
 enzymatic activity, electron transport, mitochondria, inhibitors effects on,
Musca domestica 953
 flight muscle, temperature effects, *Calliphora erythrocephala* 169
 functional morphology, clytra, *Coleoptera* 6539
 gas exchange, *Araneae* 5672
 gas exchange, trachea, *Hyalophora cecropia* 5671
 metabolism, cold tolerance, acclimation, *Belgica antarctica* 8107
 metabolism, temperature, *Rhinocricus padbergi* 4986
 mitochondria, recessive mutation, effects on enzymes, *Drosophila melanogaster*
 5479
 spiracles, acroyles, gas exchange, *Tipula paludosa*, *Pedicia parvicellula* 4145
 temperature effects on, *Bruchidae* 8224
 trachea, morphology, *Periplaneta americana* 4987
- Respiratory organs,**
 growth, larvae, *Aedes atropalpus* 345

- Respiratory organs, (continued)**
morphology, larvae, *Macrolepeta mutica*, *Elmis aenea* 5337.
- Respiratory pigments,**
biosynthesis, fat body, hormones, *Blaberus discoidalis* 1774.
cytochrome levels, comparison, strains, *Tribolium castaneum* 3326.
- Respiratory system,**
anatomy, adaptations, deserts, *Menacoccus ovalis* 8924.
development, larvae, *Sarcophaga bullata* 919.
rhythms, neurophysiology, *Anax partheopeus* julio 5670.
taxonomic significance, *Trombidiformes* 156.
- Respiratory tract,**
hypersensitivity, man, seasonal variations, *Dermatophagoides farinae* 1323.
morphology, respiration, *Periplaneta americana* 4987.
- Response,**
alarm pheromone, environmental effects, *Apis mellifera* 417.
habituation, sex pheromone, effects on mating behavior, *Pectinophora gossypiella* 426.
pheromones, host plants, trapping, *Trypodendron* 701.
pressure effects, mechanoreceptors, *Periplaneta americana* 145.
sex pheromone, pheromone traps, *Ostrinia nubilalis* 596.
- Resting behavior,**
breeding status, gravid, virgin, females, *Glossina morsitans morsitans* 5851.
diurnal variations, physical activity, environmental effects, temperature, humidity, *Diptera* 4316.
environmental effects, *Glossina tachinodes*, Africa, West 9185.
genetic variance, *Anopheles culicifacies*, Sri Lanka 9430.
habitat preferences, environmental factors, *Glossina*, Niger, Mozambique 1178.
habitat preferences, forests, *Glossina palpalis*, Mali 436.
silk, webs, *Insecta* 5905.
- Restriction endonuclease,**
DNA, nucleotide sequence, sex differences, *Drosophila* 3076.
DNA polymorphism, *Drosophila* 3062.
mapping, chorion genes organization, *Drosophila* 5454.
mapping, introns, rRNA genes, nucleolar organizer region, *Drosophila hydei* 4664.
mapping, mitochondrial DNA, *Drosophila melanogaster*, *Drosophila virilis* 3875.
mapping, satellite DNA, *Drosophila nasutoides* 4665.
- Restriction endonuclease mapping,**
Adh locus, genetic variance, population genetics, *Drosophila melanogaster* 9425.
Balkan rings, chromosomes, salivary gland, *Chironomus tentans* 7830.
cut locus, *Drosophila melanogaster* 9383.
rRNA genes DNA, *Attacus ricini* 9393.
white locus, *Drosophila melanogaster* 7836.
- Retardation,**
growth, host plants extracts, *Lycopersicon esculentum*, *Heliothis zea* 2083.
- Retention,**
drug effects, cycloheximide, pyromycin, *Periplaneta americana* 3548.
habituation, cardiac conditioning, *Calliphora vomitoria* 428.
- Reticulitermes,**
disease transmission, pathogens, *Metarhizium anisopliae* 8153.
pathogens ingested, pathogenicity, *Metarhizium anisopliae*, *Beauveria bassiana*, *Gliocladium virens* 8150.
social interactions, conspecifics 413.
- Reticulitermes flavipes,**
abundance, feeding, association, wood litter fall, USA, Southeast 8598.
chemical control, pesticides, toxicity, fluorolipids 1054.
defense secretions, chemical composition, defense mechanisms 1795.
developmental stages, sexual dimorphism 5634.
hardwoods extracts, effects on survival, antifungals 3808.
lipid biosynthesis, metabolism, symbionts effects on 3573.
lipid metabolism, lipolysis 6568.
population structure, castes, seasonal variations, USA, Mississippi 2137.
population structure, sex ratio, abundance, association, colonies 585.
survival, feeding behavior, wood extracts effects on 1810.
symbiosis, uric acid recycling, gut bacteria 3574.
- Reticulitermes lucifugus,**
neurosecretion, distribution, brain 123.
social behavior, nest building, colonies 4650.
- Reticulitermes virginicus,**
abundance, feeding, association, wood litter fall, USA, Southeast 8598.
defense secretions, chemical composition, defense mechanisms 1795.
- Reticulitermes,**
pest control, wood, alkylammonium derivatives 3587.
- Retina,**
anterior median eye, anatomy, functional morphology, photoreceptors, *Plexipus* 4971.
growth, development, neurons, *Blattodea* 898.
oxygen exchange, energy requirements, dark, *Apis mellifera* 183.
retinal-binding protein, characterization, spectrophotometry, *Apis mellifera* 8919.
visual stimuli, landing behavior, *Musca domestica* 7298.
- Retinal-binding protein,**
characterization, spectrophotometry, retina, *Apis mellifera* 8919.
- Retinol,**
deficiency, effects on phototaxis, photosensitivity, *Bombyx mori* 2767.
- Retractoccephalus,**
life history, parasites, *Insecta* 7383.
- Reviews,**
adenylate cyclase, biochemical characteristics, identification, *Insecta* 5682.
anatomy, morphology, sensilla, *Culicidae* 8921.
biochemical characteristics, tissues, body fluids, *Ixodidae* 8939.
biological control, pathogenicity, *Bacillus thuringiensis*, *Culicidae* 6602.
biological control, pest control, *Nematoda*, *Insecta* 7666.
biological control, pest control, parasitoids, *Insecta* 7665.
check lists, species composition, geographical distribution, *Ecitoninae*, Mexico 9500.
control programs, biophysics, *Termitidae* 738.
control programs, malaria vectors, *Culicidae* 8409.
disease transmission, disease control, *Arthropoda* 9246.
diseases, demersoneleosis virus, *Bombyx mori* 8988.
dispersal, geographical distribution, introduced species, *Chrysomya chloropyga*, *Chrysomya megacephala*, *Chrysomya albiceps*, Brazil 9172.
ecdysone metabolism, *Insecta* 6574.
embryogenesis, blastoderm determination, metameric pattern, *Drosophila* 4246.
excretion, renal function, fluids transport, Malpighian tubules, *Insecta* 8931.
forest management, pests protection, *Insecta*, Germany, Fed. Rep. 1392.
gene regulation, genomes, *Drosophila* 9380.
- Reviews, (continued)**
granulosis virus, biological control, *Insecta* 4505.
herbivores competition, community structure comparison, *Insecta* 593.
herbivores, ecological distribution, host plants, *Xanthium spinosum*, *Xanthium strumarium*, *Insecta*, World 8357.
host plants, geographical distribution, *Uroleucon* 6808.
host preferences, host plants, *Helianthus annuus*, *Insecta* 4390.
malaria vectors, disease control, pesticide resistance 644.
neurophysiology, neurotransmitters, hormones, modulators, octopamine, *Insecta* 4127.
parasites, hosts, range, *Leptinus*, North America 9498.
pest control, biological control, fungi, *Insecta* 8509.
pesticide resistance, mechanisms, *Arthropoda* 9284.
phagostimulants, hematophagy, *Arthropoda* 492.
phoresy, *Scotorythini*, *Meliponinae*, Neotropical Region 9130.
photoreceptors, circadian rhythms, photoperiod, *Insecta* 8922.
phylogeny, paleontology, *Insecta* 3135.
potassium transport, midgut, larvae, *Lepidoptera* 8081.
segmentation, cytology, *Insecta* 8897.
skin diseases, *Sarcoptes scabiei*, *Psoroptes*, *Demodex* 2932.
taxonomy, classification, *Coniopteryx* 4902.
taxonomy, *Gyponana*, Nearctic Region 8812.
taxonomy, morphology, biology, *Isoptera*, India 5427.
taxonomy, morphology, host plants, *Gelechiidae* 4896.
taxonomy, morphology, *Nemopteridae*, Turkey 4727.
taxonomy, morphology, parasites, *Geomydoecus californicus* 85.
taxonomy, morphology, *Roederidae* 6401.
viruses replication, *Insecta* 8990.
- Revision,**
Stenometopiini, 78 new taxa, *Cicadellidae*, Africa 829.
taxonomy, *Aleuropteryx*, *Coniopterygidae* 1664.
taxonomy, biotyping, *Polypedium* 3198.
taxonomy, identification keys, *Archipsocus ghesquieri*, Africa 848.
taxonomy, *Meranoplus*, *Dicrospilus*, *Calptomymex*, Ethiopian Region 1652.
taxonomy, *Myrmicinae*, Ethiopian Region 1651.
taxonomy, new families, *Cicadellidae*, Africa 828.
taxonomy, new subspecies, *Janomima dandfieldi*, Africa 840.
taxonomy, nomenclature, *Pompius* 834.
taxonomy, *Phyciodes* 1661.
taxonomy, *Rhopalosomatidae* 832.
taxonomy, synonymy, *Archisolv*, *Saldua* 1621.
taxonomy, synonymy, *Oedule* 1670.
taxonomy, synonymy, *Paraboloponinae* 1640.
taxonomy, synonymy, *Scirphophaga* 1662.
taxonomy, *Usambilla* 1669.
Xestopus, *Nepalocalathus*, *Witmerosphodrus*, Nepal 808.
- Reward,**
effects on feeding behavior, *Apis mellifera* 542.
- Rhabdopyris,**
taxonomy, morphology 3218.
- Rhabdopyris abjectus,**
new species, morphology 3218.
- Rhabdopyris ablusus,**
new species, morphology 3218.
- Rhabdopyris aietris,**
new species, morphology 3218.
- Rhabdopyris anxius,**
new species, morphology 3218.
- Rhabdopyris arenarius,**
new species, morphology 3218.
- Rhabdopyris avidus,**
new species, morphology 3218.
- Rhabdopyris arcanellus,**
new species, morphology 3218.
- Rhabdopyris asperulus,**
new species, morphology 3218.
- Rhabdomyces lobjoyi,**
gut microflora, *Myriapoda* 8306.
- Rhabdopterus picipes,**
pests, ornamental plants, infestation, abundance 1429.
- Rhabdovirus,**
Carica papaya necrosis, vectors, *Empoasca papayae*, Venezuela 7660.
- Rhabdovirus oryctes,**
pest control, *Anacardium occidentale* plantations, *Placoderus ferrugineus* 8453.
- Rhachomyces basilewskyi,**
parasitism, *Eunostus burgeoni*, new records 5990.
- Rhachomyces leleupidii,**
parasitism, *Leleupidia kahuziana*, new records 5990.
- Rhadinopsylla pentacantha,**
new records, parasites, *Mustelidae*, Switzerland 5194.
- Rhaebothorax,**
species composition, USSR, Siberia 7106.
- Rhaebothorax jamaicensis,**
new species, taxonomy, morphology, USSR, Siberia 7106.
- Rhaebothorax tunguskus,**
new species, taxonomy, morphology, USSR, Siberia 7106.
- Rhagio,**
breeding, site location, substrate preferences 3534.
- Rhagium inquisitor,**
wood borers, digestion, nutrition, feeding behavior 4344.
- Rhagoletis basiola,**
oviposition deterrents, intraspecific relationships 1920.
- Rhagoletis cerasi,**
sex pheromone, factors affecting release, role, mating behavior 8960.
- Rhagoletis indifferens,**
development, emergence, temperature effects on 5834.
population density, population-environment relations, environmental factors, pupae, spatial distribution 586.
- Rhagoletis mendax,**
mating, oviposition, diurnal variations, host plants, host preferences, *Vaccinium* 3639.
- Rhagoletis pomonella,**
chemoreceptors, morphology, electrical properties 4136.
csoyphageal bulb, development, morphology, histology 8076.
fruit-marking pheromone, production, site location 3353.
pest control, aromatic compounds, attractancy, *Malus* 8500.

- Rhagoletis pomonella**, (continued)
pest control, field trials, attractants, chemical stimuli, visual stimuli 4583.
pests, infestation, USA, Oregon 3762.
pupae, parasitism, USA, Connecticut 2819.
recognition, oviposition deterrents, pheromones, *Rhagoletis zephyria* 8971.
sexual reproduction, oviposition, environmental effects, substrate specificity 2684.
- Rhagoletis zephyria**,
oviposition deterrents, pheromones 8971.
- Rhagoletisotypa uniformis**,
taxonomy, new species, morphology, keys, USA, Texas 2420.
- Rhamphomyia nitidula**,
new records, geographical distribution, Czechoslovakia 7901
- Rhamphus**,
new species, taxonomy, morphology, France 8757.
- Rhantus elegans**,
new records, morphology, Venezuela 3184.
- Rhapalocera**,
surveys, check lists, USA, California, Santa Cruz I. 7118.
- Rhaphiomidas**,
habitat, activity patterns 5238.
- Rhaphiomidas aitkeni**,
habitat, phenology, behavior, USA, California 9087.
- Rhaphum nishidai**,
new species, Nepal 1609.
- Rhaphiostrongylus virgator**,
molting, secretions, anal glands 6594.
- Rhegmatothrips rusemi**,
new species, taxonomy, biogeography, morphology 4048.
- Rhicephalus appendiculatus**,
vectors, temperature effects on molting, *Theileria parva* 2181.
- Rhigotopus**,
new genera, taxonomy, morphology, South America 7976.
new genera, taxonomy, South America 5575.
- Rhigotopus andinensis**,
new species, taxonomy, morphology, South America 7976.
new species, taxonomy, South America 5575.
- Rhinocapsus minutus**,
synonymy, *Rhinocapsus rubricans* 5581.
- Rhinocapsus rubricans**,
synonymy, *Rhinocapsus minutus* 5581.
- Rhinocricus padbergi**,
temperature, effects on respiration, metabolism 4986.
- Rhinocryptidius vittatus**,
morphology 4852.
- Rhinoecylus conicus**,
larvae, survival, environmental effects, crowding 1938
parasites, infestation, USA, Virginia 5937.
population levels, parasites, predators effects on 5993.
prey, feeding behavior, predators, insects, USA, Virginia 1200.
sampling methodology, population density estimation 1695
weed control, environment management, *Carduus nutans*, USA, North Dakota 2208
- Rhinocypha unimaculata**,
mating behavior, courtship, display 6667.
- Rhinocys**,
keys, morphology, geographical distribution, USA 790.
- Rhinocys bruchodes**,
new records, morphology, USA 790.
- Rhinocys castor**,
introduced species, geographical distribution, USA 790.
- Rhinocys pericarpus**,
introduced species, geographical distribution, USA 790.
- Rhinocys brasiliensis**,
morphology, males, new records, occurrence, Brazil 6502
- Rhinocys viridiaceus**,
food preferences, feeding behavior, adults, morphology, larvae, Canada, British Columbia, Vancouver I. 2769.
- Rhipicephalus appendiculatus**,
infection, detection methodology, *Theileria* 8133
infestation, resistance, Mammalia 2926
morphology, life cycle, Africa 2377
parasites, radioactive labelling, *Theileria parva* 3415
physiology, salivary gland, secretion, osmoregulation, saliva, cells, physiology 257
salivary gland, ultrastructure, cytology, host-parasite interactions, *Theileria parva* 256
temperature receptors, ultrastructure, electrophysiological recording 235
transmission, *Theileria mutans*, South Africa 665
vectors, disease transmission, breeding, habitat, Africa 3683
vectors, disease transmission, Nairobi sheep disease virus 4511
vectors, livestock pathogens, *Theileria taurogalli* 3657
- Rhipicephalus bursa**,
parasites development, sporozoites, *Babesia ovis* 5024
parasites, reproduction, *Babesia ovis* 4184
- Rhipicephalus everti**,
exocrine glands, morphology, blood meals 3378
- Rhipicephalus everti**,
vectors, disease transmission, sheep, Karai virus 4512
- Rhipicephalus everti everti**,
occurrence, man, case reports, South Africa 1367
repellents, efficiency, assays 1369
- Rhipicephalus furanicus**,
parasitism, *Tabanus leleai* 9133
- Rhipicephalus haemaphysaloides haemaphysaloides**,
parasites, life cycle 5947
- Rhipicephalus sanguineus**,
cell cycle, meiosis 1517
disease transmission, imported diseases, case reports, exanthematous typhus 1332
infection, pathogens, *Brucella canis* 5029
infestation, dogs, seasonal variations, South Africa 9247
infestation, immunity 6883
larvae, habitat preferences, temperature, humidity, environmental effects, survival, molting 1175
nymphs, disease transmission, *Babesia microti* 8418
oviposition, egg production, energetics 8256
- Rhipicephalus zambeziensis**,
new species, taxonomy, morphology, life cycle, Africa 2377.
- Rhithrogena iridina**,
new records, parasitism, *Trichoduboscia epeori* 5232.
- Rhithrogena robusta**,
sedimentation, ash, streams 6236
- Rhithrogena theischingeri**,
new species, taxonomy, morphology, Turkey, Iran 4006.
- Rhizoglyphus caliae**,
enzymatic activity, lysozyme 1764
- Rhizoglyphus robini**,
enzymatic activity, lysozyme 1764
- Rhizopertha dominica**,
mycetome symbionts, antibiotics effects on, diets 7535
pest control, stored products, antifedants, repellents 7729.
symbionts, microorganisms, transmission (sexual) 7536
toxicity, methyl bromide, phosphine 1073
uptake, metabolism, fumigants, phosphine, susceptibility, resistance, pest control 1044
- Rhizopus artocarp**,
fruit rot, disease transmission, Insecta 2232
- Rhodesia**,
morphology, genitalia, geographical variations, reproductive isolation, Males, *Drosophila teissieri*, Guinea 1552
- Rhodnius**,
cells differentiation, electropotential, ovary 3512
eggs, morphology, coloration, identification 4099
- Rhodnius nasutus**,
disease transmission, *Trypanosoma cruzi*, Brazil 5286
- Rhodnius pallens**,
Parasites, host selection, Mammalia, Panama 667
- Rhodnius prolixus**,
antifedants, precocene, analogs, larvae 8963
blood meals, chemical stimuli, ATP, nucleotides 5930
development, larvae, molting hormones, Precocene II 1882
digestive tract, enzymes, diets, aminopeptidase, carboxypeptidase 1760
diuresis, fluids adsorption, midgut 5679
egg production, nerves role, mating 5080
fenitrothion, toxicity, eggs 9022
flight activity, lipid metabolism, energetics 4955
foraging behavior, food sources orientation, locomotor activity 5926.
growth regulators, effects on development, toxicity 9054
larvae, effects of precocene II, molting, metamorphosis 364
mitochondria locomotion, microvilli growth, malpighian tubules, 5-hydroxytryptamine effects on 162.
molting, activity patterns, stereotyped behavior 4340.
molting, development, hormones 5002.
molting, metamorphosis, physiology effects on 3517.
oocytes, ovaries, development, morphology, cytology 326.
oogenesis, cells interaction 983
oogenesis, follicles junctions development 1130
protein biosynthesis, accessory gland 3375
saliva, anti-hemostatic components, activity, thromboxane A₂ 7361
saliva, serotonin, histamine, antagonism 3385
sex hormones source, neuroendocrine system cells 964.
ultrastructure, neurosecretion, organs, abdomen 251.
vectors, parasites detection methodology, *Trypanosoma rangeli* 4486
vitellogenesis, hormones effects on 3513
water balance, flight, hemolymph, diuresis 7351.
- Rhodoideus**,
pollen, honey toxicity, case reports, *Apis mellifera*, Nepal 5321.
- Rhodotulra**,
characterization, internal microflora, *Apis mellifera* 2013.
- Rhombogaster bactriana lindt**,
taxonomy, morphology, USSR 4102.
- Rhombognathus**,
taxonomy, morphology, keys 6351
- Rhopalicus**,
host-parasite interactions, *Dendroctonus frontalis* 505.
- Rhopalidae**,
keys, morphology, North America 6332.
phylogeny, food plants 8671
- Rhopalocera**,
flight activity, aerodynamic properties 8902
seasonal variations, species composition, Spain, Donana Biological Reserve 6865.
species composition, sub-alpine environments, USSR, Peter the Great Mts. 7088.
species composition, zoogeography, alpine environments, USSR, Tajikistan 7071.
surveys, entomofauna, Mongolia, People's Rep. 4736
- Rhopalomyia californica**,
pest control, biological control, natural enemies 6171
population dynamics, pest control, parasitoids, urban environment, USA, California 4572.
- Rhopalophonus**,
keys, morphology, India 7198.
- Rhopalophonus chretis**,
new species, taxonomy, morphology, India 7198.
- Rhopalophisum**,
pathogens, new records, Entomophthora, Finland 5721.
- Rhopalophisum insertum**,
diapause, eggs, cold tolerance, seasonal variations 6638.
- Rhopalophisum maldis**,
barley yellow dwarf virus detection, serological tests 6611.
disease transmission, barley yellow dwarf virus 8468.
infectivity, barley yellow leaf virus, seasonal variations, Australia, Victoria 2618.
life cycle, pests, infestation, Zea mays, India 9338.
natural enemies, crop fields, distribution, Zea mays 7728.
pest control, predators, Coccinellidae, Zea mays 5295.
population status, crop fields, British Isles 6927.
vectors, maize dwarf mosaic virus transmission 3806
vectors transmission 4195
- Rhopalophisum padi**,
barley yellow dwarf virus detection, serological tests 6611.
disease transmission, barley yellow dwarf virus 8468.
disease transmission, barley yellow dwarf virus 9293.
egg production, survival, overwintering, Finland 5225.

- Rhopalosiphum padi**, (continued)
flight activity, diurnal variations, temperature effects on 7516
flight activity, phenology, migrations 6826
flight activity, settling behavior, disease transmission 3562
growth, survival, reproduction, host plants, *Prunus patris* 2838
gynoparae, population dynamics, life cycle, fecundity, survival 2681
infectivity, barley yellow leaf virus, seasonal variations, Australia, Victoria 2618
overwintering eggs, mortality, abundance, environmental effects 2682
pests, effects on plants, *Triticum aestivum* 548
population dynamics, fecundity, survival, gynoparae, Finland 5226
population status, crop fields, British Isles 6927
vectors, barley yellow dwarf virus, infection, yield, *Triticum* 8444
vectors, disease transmission, barley yellow dwarf virus 7649
viruses transmission 4195
viruses transmission, infection 2178
- Rhopalosiphum rufiabdominalis**,
infection, viruses transmission 2178
vectors, disease transmission, barley yellow dwarf virus 7649
- Rhopalosiphum padi**,
survival, feeding, resource allocation, males, gynoparae 5919
- Rhopalosomatidae**,
revision, taxonomy 832
- Rhopalum clavipes**,
new records, parasitism, eggs, *Ptychoneura*, Canada, Ontario 4377
- Rhopalarus laicauda**,
pectines, morphology, dentition 4942
- Rhopalarus princeps**,
morphology, types 8883
- Rhopalus tigrinus**,
new records, geographical distribution, morphology, North America 6332
- Rhorus bartelsi**,
new species, morphology, taxonomy 1650
- Rhorus gagesianus**,
new species, morphology, taxonomy 1650
- Rhus**,
host plants, *Gelechidae* 4896
- Rhyacionia buoliana**,
pest control, forests, food plants, *Pinus sylvestris*, *Pinus pallasiensis* 7690
pest control, pheromones 3710
- Rhyacionia basitellii**,
pests, infestation, damage, geographical variations, *Pinus ponderosa*, USA, Nebraska 4405
- Rhyacionia frustana**,
parasitism, infestation, community composition, age effects, *Pinus taeda* 1229
pest control, infectivity, *Laspeyresia pomonella granulosis virus* 9332
pest control, integrated control, life cycle, host plants, USA, California 5318
sex pheromone, chemical composition, pest control 214
- Rhyacionia rigidana**,
developmental stages, instars 6723
- Rhyacionia**,
new species, taxonomy, morphology, USA, California, Placer Co. 6461
surveys, species composition, taxonomy, Hungary 3940
- Rhyacionia acropedes**,
sedimentation, ash, streams 6236
- Rhyacionia fuscula**,
abdomen exocrine glands, defence secretions 3388
- Rhyacionia obscura**,
biology 1981
- Rhyacionia ocellal**,
new species, Turkey 4066
- Rhyacionia spinata**,
morphology, females, USA, California, Placer Co. 6461
- Rhyacionia vae**,
sedimentation, ash, streams 6236
- Rhyacioniidae**,
taxonomic revision, morphology, identification keys, geographical distribution, Canada 6462
- Rhyacophilidae**,
check lists, geographical distribution, USA 8694
- Rhyacophytidae**,
taxonomy, morphology, new species, new records, India 7134
- Rhyacophytus shoreicola**,
new species, taxonomy, morphology, India, West Bengal 8714
- Rhyacinae**,
new species, new genera, taxonomy, morphology, India 7172
- Rhyacineus fagi**,
cold hardiness, acclimatization 1792
- Rhyacineus mangiferae**,
morphology, taxonomy, India 7172
- Rhyacophoridae**,
taxonomy, keys, Ogasawara Is. 3979
- Rhynchosciara americana**,
arylamidases, digestion, proteins, midgut 6545
digestive tract, histology, enzymatic activity 2543
gene amplification, puffing, salivary gland chromosomes 7837
midgut, enzyme activity, digestion, larvae 6546
oogenesis, hemolymph, proteins 3516
- Rhynchota**,
morphology, head, evolution 3134
- Rhynchotermes**,
defence secretions chemical composition, phylogeny 1566
- Rhythmus**,
abdomen, neurophysiology, molting behavior, *Schistocerca* 3278
activity patterns, motivation, *Varroa jacobsoni* oudemans 9089
emergence, streams, *Chironomidae*, Canada, Ontario 6224
gut contraction, larvae, *Bombyx mori* 2549
mating, cuticle growth synchronization, *Blaberus fuscus* 8999
nest building, foraging behavior, *Heriades truncorum* 4458
oviposition, acetic acid effects on, *Drosophila melanogaster* 2749
oviposition, *Culicidae* 3525
oviposition, external stimuli, photoperiods, *Drosophila melanogaster* 4262
respiratory system, neurophysiology, *Anax parthenope julius* 5670
temperature effects, enzymes, β -glucosidase, digestive tract, *Halica caerulea* 1745
- Rhytidoponera metallica**,
Dufour's gland, defense secretions, chemical composition, volatiles, Australia 246
feeding behavior, seeds, dispersal, *Lepidoponera laterale*, *Eucalyptus* 1210
- Rhyzobius satelles**,
predators, biological control, *Temnaspisidius destructor*, New Hebrides 4576
- Rhyzopertha dominica**,
aggregation pheromone, chemical composition 1779
aggregation pheromone, mating behavior, males 1931
cold acclimation, temperature effects, coma, oxygen consumption 3369
community composition, species diversity, seasonal variations, Japan 3640
development, larvae, grain, *Zea mays* 5946
heat tolerance, exposure, mortality, grasses, Australia 975
heat tolerance, temperature effects, survival, mortality, immature stages 365
pest control, stored products, growth regulators 3787
pest control, stored products, insecticides 2190
pest control, stored products, insecticides 7768
pest control, stored products, temperature 6928
pests, infestation, stored products, *Hordeum* 2257
pests, stored products, growth regulators, residual effects 8572
pests, stored products, *Manihot esculenta*, Malaysia 5386
sex differences, morphology, identification 870
stored products pest control, heat treatments 2251
stored products pest control, methodology, microwave radiation 3793
stored products pest control, microwave radiation 3784
stored products pests, development, whey-soy drink mix 9323
stored products pests, phosphine toxicity 1051
stored products pests, phosphine toxicity, atmospheric conditions effect on 1050
stored products pests, vertical distribution, oxygen, carbon dioxide effects on 1445
temperature effects, dose dependency, mortality, pest control 237
- Ribis**,
host plants, preferences, *Eriosoma* 8356
- Riboflavin**,
vitamin deficiencies, effects on parasitism susceptibility, *Polyplax spinulosa*, *Rattus rattus* 6779
- Ribonucleoproteins**,
isolation, characterization, *Drosophila melanogaster* 942
nuclei, UI RNA, protein composition, heat shock, *Drosophila* 8623
structure, electron microscopy, *Drosophila melanogaster*, *Calliphora erythrocephala* 7839
- Ribosomal protein S6**,
dephosphorylation, heat shock, *Drosophila melanogaster* 7319
- Ribosomal proteins**,
biosynthesis, embryogenesis, *Drosophila* 1537
characterization, *Drosophila melanogaster* 3332
fractionation, electrophoresis, mitochondria, *Locusta migratoria* 3265
genes, chromatin, deoxyribonuclease I, site location, *Drosophila melanogaster* 1503
genes, organization, *Drosophila* 9392
purification, characterization, *Drosophila melanogaster* 8935
- Ribosomes**,
cytosts, salivary gland cells, *Drosophila muelleri*, *Drosophila arizonensis* 5446
distribution, factors affecting, digestive tract cells morphometry, *Aedes aegypti* 923
electron microscopy, salivary gland, *Chironomus tentans* 4675
rDNA, insertion sequences mobility, *Drosophila melanogaster* 3081
rRNA, genes, structure variation, *Drosophila melanogaster* 5448
subunit structure, monomers, *Drosophila melanogaster* 9385
- Ricantidae**,
geographical distribution, Turkey 4735
- Ricantia fenestrata**,
natural enemies, parasites, predators 9137
- Rice**,
pest control, insecticides, *Orseolia oryzae*, China, People's Rep. 1013
- Rice ragged stunt virus**,
detection, vectors, *Nilaparvata lugens* 8149
infection, *Nilaparvata lugens* 7376
- Rice tungro virus**,
disease transmission, vectors, *Nephotettix virescens* 7661
vectors, crop fields, *Nephotettix virescens*, *Oryza sativa* 7647
- Ricinoides megahanuseni**,
new species, taxonomy, morphology, Ivory Coast 7156
- Ricinoides westermanni**,
immature stages, morphology, Ivory Coast 7156
- Ricinus communis**,
host plants, insecticides effects on feeding, food utilization, *Achaea janata* 7412
ricinus rubeculae, morphology, parasites, *Eritrichus rubecula*, Spain 4103
- Rickettsia**,
experimental infection, *Ornithodoros moubata*, pathogenicity, guinea-pigs 9234
pathogens, serotyping, *Dermacentor andersoni*, USA, Montana 1006
Rocky Mountain spotted fever, vectors, hosts, *Mammalia*, *Acarina*, USA, California 1321
- Rickettsia akari**,
disease resistance, experimental infection, *Ornithodoros moubata* 8994
- Rickettsia conorii**,
disease transmission, imported diseases, case reports, *Rhipicephalus sanguineus* 1332
- Rickettsia montana**,
pathogens, serotyping, *Dermacentor andersoni*, USA, Montana 1006
- Rickettsia prowazekii**,
disease transmission, vectors, *Dermacentor variabilis*, *Glaucomys volans* 1322
- Rickettsia rhipicephali**,
pathogens, serotyping, *Dermacentor andersoni*, USA, Montana 1006
- Rickettsia rickettsii**,
pathogens, serotyping, *Dermacentor andersoni*, USA, Montana 1006
- Rickettsia tsutsugamushi**,
infection, *Trombiculidae*, Thailand 8135
spotted fevers, guinea-pigs, *Ornithodoros moubata*, spotted fevers, transmission 9235
- Rickettsia-like organisms**,
infection, mortality, *Trichoplusia ni*, USA, California 5731
- Rileys americana**,
association, galls, *Rudbeckia laciniata*, *Asphondylia helianthiglobulus* 6020

- Relva americana**, (continued)
interspecific relationships, galls, *Asphondylia helianthoglobulus*, USA.
Pennsylvania 5182
- Riparian environments**,
ponds, leaf litter, overwintering, population density, *Gerris odontogaster* 6003
- Ripening**,
effects on infestation, fruit trees, *Canca papaya*, *Dacus dorsalis*, USA, Hawaii 4616
- Rhipicerphalus appendiculatus**,
salivary gland, parasites, sporogony, ultrastructure, *Theileria parva* 9007
- Riptortus dentipes**,
parasitoids, pests, *Clavigralla tomentosicollis*, Africa 2814
- River basins**,
ecological distribution, disease reservoirs, *Anopheles messeae*, Yugoslavia 670
- Rivers**,
biogeography, Insecta, Australia, New Zealand 3952
geographical distribution, new records, Chironomidae, France, Pyrenees 819
heavy metals bioaccumulation, sex differences, Dytiscidae, USSR 5436
new species, *Porenodonta ramadei*, France, Midi-Pyrenees 817
surveys, Ephemeroptera, Czechoslovakia, Latorica R 2355
water levels, effects on Simuliidae control, South Africa 669
- RNA**,
fluorescence, hybridization, DNA, *Drosophila melanogaster*, *Drosophila hydei* 2304.
gene mapping, *Drosophila melanogaster* 1494.
levels, metamorphosis effects on, *Bombix mori* 952.
nuclei, DNA hybridization analysis, larvae, *Drosophila* 6240
nucleotide sequence, secondary structure, splicing, *Drosophila melanogaster* 1499.
protein biosynthesis, embryogenesis, *Hyalomma dromedarii* 5829
role, infection, *La Crosse virus*, snowshoe hare virus, *Aedes triseriatus* 7386
transcription, DNA nomads, *Drosophila melanogaster*, biochemical analysis, DNA nomads 5681.
viruses, characterization, biological control, Insecta 8147
- rRNA**,
genes, sex chromosomes, exchange, males, *Drosophila melanogaster* 3895
- RNA biosynthesis**,
cytoblemmal effects on, *Anopheles albimanus* 6273.
DNA biosynthesis, fat body, *Coccinella septempunctata* 935.
DNA methylation, polytene chromosomes, *Sciara coprophila* 7833.
endotoxins effects on, *Bacillus thuringiensis*, Insecta 7369.
juvenile hormones effects on, developmental stages, *Galleria mellonella* 7862.
juvenile hormones, 20-hydroxyecdysone effects on, *Antheraea polyphemus* 3885
narciclasine, puromycin effects on, salivary gland, *Chironomus thummi* 3882
nuclear polyhedrosis virus, infection, *Bombix mori* 3398.
ovary, sterility, mutants, characterization, *Drosophila melanogaster* 1530.
protein biosynthesis, developmental stages, *Acyrtosiphon pisum* 934.
protein composition, silk gland, instars, *Philaema cynthia ricini* 2727.
mRNA, poly (A)-containing, poly (A)-lacking, oogenesis, *Calliphora erythrocephala* 8244
salivary gland chromosomes, gene expression, *Chironomus tentans* 3873.
transcription, salivary gland, *Chironomus thummi* 5019.
transport, salivary gland, *Lygacus* 3072.
- RNA polymerase**,
 α -amanitin derivatives effects on, *Drosophila melanogaster* 8953.
DNA, transcription, genes, *Drosophila* 1507
isolation, characterization, *Heliothis zea* 1511.
- RNA polymerase I**,
purification, characterization, pupae, *Drosophila hydei* 8086
- RNA polymerase II**,
 α -amanitin binding, thermal stability, kinetics, comparison mutants, association RplI-C4 locus, *Drosophila melanogaster* 7045.
developmental genes, temperature-sensitive mutant, *Drosophila melanogaster* 9418
immunoassays, *Drosophila melanogaster*, *Chironomus thummi* 2586
inhibition, amann analogs, *Drosophila melanogaster* 3074.
role, transcription heat shock genes, *Drosophila melanogaster* 6274
- hnRNA**,
genes, 5,6-dichloro-1,8-D-ribofuranosylbenzimidazole inhibition, transcription initiation, *Chironomus tentans* 8652
ribonucleoproteins structure, electron microscopy, *Drosophila melanogaster*, *Calliphora erythrocephala* 7839.
- mRNA**,
content, developmental stages, *Drosophila melanogaster* 1493
cDNA hybridization, salivary gland, *Chironomus tentans* 7829
fat body, protein biosynthesis, plasma proteins, *Bombix mori* 3913
heat shock, induction, genes, cloning, characterization, *Drosophila melanogaster* 3877
nucleotide sequence, comparison cDNA, YPI gene, YPII gene, *Drosophila melanogaster* 5455
nucleotide sequence, homology, developmental stages, *Drosophila melanogaster* 1530
poly(A) containing, cDNA hybridization, gene expression, silk gland, larvae, *Bombix mori* 8112
poly(A)-containing, purification, protein biosynthesis, fibroin, silk gland, *Bombix mori* 8979
poly(A)-containing, poly (A)-lacking, RNA biosynthesis, oogenesis, *Calliphora erythrocephala* 8244
protein biosynthesis, translation, heat shock, *Drosophila* 8932
Sindbis virus, protein biosynthesis, cell-free system, *Aedes albopictus* 3057
storage proteins, identification, *Sarcophaga peregrina* 8088
translation, chorion proteins, *Bombix mori*, macroinjection, oocytes *Xenopus laevis*, cDNA hybridization analysis 8083
translation, heat shock, protein biosynthesis, *Drosophila melanogaster* 5708
translation, protein biosynthesis, embryos, *Manduca sexta* 3887
vitellogenin, isolation, assays, juvenile hormones stimulation transcription, fat body, *Locusta migratoria* 6569
yolk proteins, nucleotide sequence, ecdysone effects on transcription, *Drosophila melanogaster* 4662
- rRNA**,
biosynthesis, mutants, *Drosophila melanogaster* 1538
biosynthesis, oocytes, diapause, *Cordulia aenea* 2680
genes, analysis, Y chromosome nucleolus organizer region mutants, *Drosophila melanogaster* 5456
genes, cDNA transcription, cell-free system, *Drosophila melanogaster* 8624
genes, DNA restriction endonuclease mapping, hybridization analysis, *Attacus ricini* 9393
genes, gene mapping, heterochromatin, chromosomes, *Drosophila melanogaster* 5636
- rRNA**, (continued)
genes, nucleolus organizer region, introns characterization, restriction endonuclease mapping, *Drosophila hydei* 4664
genes, repeated sequence, evolution, *Drosophila melanogaster* 8657.
nucleotide sequence, evolution, *Drosophila melanogaster* 7879
nucleotide sequence, silk gland, *Bombix mori* 2306
ribosomes, genes, structure variation, *Drosophila melanogaster* 5448.
- rRNA 28S**,
nucleotide sequence, Aphididae 8082.
- rRNA 5S**,
genes, organization, chromosomes, hybridization analysis, *Drosophila melanogaster* 6244
nucleotide sequence, relationship, evolution, *Philaema cynthia ricini* 8092.
nucleotide sequence, thermal stability, secondary structure, *Acyrtosiphon pisum* 4686
secondary structure, *Bombix mori* 3914
- rRNA 5.8S**,
nucleotide sequence, Aphididae 8082.
nucleotide sequence, silk gland, *Philaema cynthia ricini* 9388
silk gland, nucleotide sequence, secondary structure, *Bombix mori* 4177
- snRNA**,
KC-H cells, characterization, comparison, Mammalia, *Drosophila* 7861.
- IRNA**,
aminoacylation, age effects on protein biosynthesis, *Drosophila melanogaster* 4235.
biosynthesis regulation, *Bombix mori* 8064
genes, organization, chromosomes, hybridization analysis, *Drosophila melanogaster* 6244
genes, tyrosine, localization, DNA: *Drosophila melanogaster* 2303
nucleotide sequence, secondary structure modification, chloroacetaldehyde, *Drosophila melanogaster* 4667
- IRNA Ala**,
silk gland, purification, *Philaema cynthia ricini* 3872
- IRNA Arg**,
genes, transcription initiation sites, characterization, *Drosophila* 9390
- IRNA Lys**,
genes, DNA nucleotide sequence, *Drosophila melanogaster* 9396.
nucleotide sequence, *Drosophila melanogaster* 9391
- IRNA Val**,
genes, analysis, *Drosophila melanogaster* 3878
genes, cDNA, cell-free system transcription, *Drosophila melanogaster* 9389
genes, characterization, gene mapping, nucleotide sequence, *Drosophila melanogaster* 4671.
- Roos**,
environmental hygiene, surveys, Diptera, Czechoslovakia 1349
human impact, disease control, malaria, Brazil, Amazonas 8421
- Rocky Mountain spotted fever**,
vectors, hosts, Mammalia, Acarina, USA, California 1321.
- Roentelia**,
disease reservoirs, vectors, Colorado tick fever, *Dermacentor underwoodi*, USA 637.
hosts, aging methods, estradiol binding, blood meals, *Culicoides* 6888.
hosts, blood meals feeding behavior, *Aedes aegypti* 5160
parasites, abundance, Arthropoda, Egypt, Arab Rep 3588
parasites range extension, Anoplura, Acari, Canada, Quebec 4386
vectors, dermatitis, man, case reports, *Ornithonyssus bacoti* 1363.
- Rothlis**,
BHC effects on feeding, fertility 9056.
- Roederiodia**,
new species, taxonomy, morphology, reviews 6401.
- Rogas lymantriae**,
parasites, competition, hosts, *Lymantria dispar*, *Apanteles melanoscetus* 7545.
- Romania muscon**,
flowering phenology, pollination, Chrysomelidae, Brazil 4410.
- Romania microptera**,
light adaptations, electroretinograms sensitivity 148.
- Romania**,
apiculture products, medical importance 2928
forests, leaf litter, community composition, Uropodidae 6006.
pest damage - *Abies alba*, *Eurymia* impossible, *Eurymia grusa* 6920
- Romanosoma culicivora**,
parasites, hosts biological control, disease transmission vectors, *Culicidae* 3661.
- Romanosoma culicivora**,
hosts, parasites, postparasites, *Culex tarsalis*, *Anopheles freeborni*, control, larvae 2168
parasites, biological control, malaria vectors, *Anopheles albimanus*, El Salvador 7645.
parasites, infectivity, salinity effects, *Culicoides* 266.
parasites, population establishment, survival, biological control, *Aedes polynesiensis*, Tokelau Is. 7630
transport methodology, parasites, *Culicidae* 4078.
- Roos**,
crops, absorption, insecticides, parathion 7747.
damage, pest resistance measuring techniques, Zea mays, *Diabrotica virgifera* 6915.
host plants, ecological distribution, soil, Aphididae, India 5258.
pest control, insecticides, Capsicum annum, Insecta 7695.
pests effects on, *Geonica uncinaria* 726.
- Roptrocera xylophagorum**,
host-parasite interactions, *Dendroctonus frontalis* 505.
- Rosa carolina**,
host plants, effects on predation, *Mitsumela vatia* 457.
host plants, foraging behavior, *Bombus*, *Syrphidae* 2115.
- Rosalia nakanishi**,
new species, Nepal 1609.
- Ros River virus**,
disease transmission, vectors, *Aedes polynesiensis*, *Aedes aegypti* 3695.
vectors, disease transmission, *Culex pipiens quinquefasciatus* 7632.
- Rotundomiris**,
new genera, taxonomy, morphology, Papua New Guinea 4851.
- Rotundomiris punctatus**,
new species, taxonomy, morphology, Papua New Guinea 4851.
- Rotylenchulus reniformis**,
pest control, *Phaseolus vulgaris* 709.
- Rousettus amplexicaudatus**,
hosts, parasites, *Trombiculidae*, Philippines 794.

- Royal jelly**, chemical composition, *Apis mellifera* 242.
fatty acids, lipid composition, *Apis mellifera* 3390.
insulin-like peptides, purification, *Apis mellifera* 5685.
synthesis, *Apis mellifera* 5697.
- Royanthidium bicoloripes**, new species, taxonomy, morphology, Morocco 7210.
- Rudbeckia laciniata**, galls, species composition, association, *Asphondylia helianthiglobulus* 6020.
- Rugitermes niger**, digestive tract anatomy, comparison, castes, Brazil 8926.
- Rumex crispus**, grazing, herbivores, *Gastrophysa viridula* 4408.
seeds size, predation effects on, *Gastrophysa viridula* 6784.
- Rumex obtusifolius**, seeds size, predation effects on, *Gastrophysa viridula* 6784.
weed control, biological control, *Gastrophysa atrocyanea* 5985.
- Rumicita grandicula**, new species, taxonomy, morphology, USSR, Transcaucasia 6423.
- Running**, circadian rhythms, photoperiods effects on, *Penplaneta americana* 918.
locomotion, morphology, leg. *Carabidae* 8063.
- Rural environments**, parasites infection, *Trypanosoma*, *Glossina pallidipes*, Kenya 1318.
- Rutula parycei**, new records, geographical distribution, Sweden, Gotska Sandöen I. 4704.
- Ruspolia differens**, life cycle 7526.
- Rutia**, diets, effects on growth, fecundity, food conversion, *Acheta domestica* 3484.
- Ryegrass mosaic virus**, disease transmission, disease control, aldicarb, Acan 1467.
- Ryu-kyu Is.**, new species, taxonomy, morphology, *Gampsocleis ryukyensis* 7238.
Rep. 8471.
- Sabah**, new species, *Pseudostegana* 3990.
- Sabulodes segrotata**, rearing methodology, artificial diets 8019.
rearing, methodology, diets, food, artificial substrates 4084.
- Sacbrood virus**, antigenic characteristics, isolates, *Apis cerana*, Thailand 5727.
- Saccharicoccus sacchari**, pests, infestation, varieties susceptibility, *Saccharum officinale* 6952.
- Saccharides**, metabolism, juvenile hormones effects on, *Pyrrhocoris apterus* 6570.
- Saccharum officinale**, agricultural practices effects on pests abundance, *Tryboryza nivella*, *Sesamia* 6951.
crop fields, life tables, pest outbreaks, *Mogannia minuta*, Okinawa 6109.
crop fields, pest outbreaks, *Scarabaeidae*, India 5361.
crop fields, pests, species composition, population levels, *Elaterridae*, Brazil, Sao Paulo 6098.
pests, *Eldana saccharina*, Ivory Coast 2098.
plant diseases, disease transmission, *Cicadulina bipunctata* zoeae, Egypt, Arab Rep. 8471.
varieties, susceptibility, pests infestation 6952.
- Saemundsonia temporalis**, parasites, new records, *Vanelhus vanelhus*, Spain 8334.
- Saemundsonia bakeri**, new species, parasites, *Haematopodidae* 516.
- Saemundsonia haematopi**, parasites, *Haematopodidae* 516.
- Safety**, public health, pest control, nuclear polyhedrosis virus, *Mamestra brassicae* 7717.
- Safety regulations**, biological control, nuclear polyhedrosis virus, granulosis virus, *Insecta* 3708.
- Sagra femorata**, morphology, larvae 6483.
- Salcinae**, keys, Panama 1634.
- Salicetia**, feeding, host plants, exudates, *Pityrogramma*, Germany, Fed. Rep., Darmstadt 1207.
- Salicetia coffeae**, developmental stages, morphology, keys, females 1705.
pest control, chemical control, insecticides, horticulture 3792.
- Salicetia hemiphaerica**, bionomics, taxonomy, biogeography, economic importance, Cuba 9095.
life cycle, bionomics, predators, *Diadiplosis cocc* 9094.
parasites, predators, Cuba 9010.
- Salicetia oleae**, biological control, parasites, eggs encapsulation, *Metaphycus swirskii* 5175.
biological control, population regulation, predation, *Cryptolaemus montrouzei* 3611.
growth regulators, RO 13-5223, effects on development 6642.
interspecific relationships, parasitism, community composition, *Iridomyrmex humilis*, *Planococcus citri*, France 3612.
mortality, population decline, surveys 3620.
population dynamics, phenology, coloration, Israel 9178.
- Saldid picular**, coloration, aggressive behavior, mimicry 5150.
- Salanum longens**, crop fields, pest control, insecticides, *Leucinodes orbonalis* 7678.
- Saiduba**, taxonomy, synonymy, *Archisolv* 1621.
- Saidula latoculis**, taxonomic revision, synonymy, nomenclature, morphology, genitalia, males 6414.
- Saline environments**, ecological distribution, effects on magnesium sulfate tolerance, *Aedes taeniorhynchus*, *Aedes dorsalis* 8101.
feeding behavior, host plants, *Clanoneurum americanum*, *Suaeda linearis* 5904.
- Saline water**, recycling methodology, mass rearing, eggs, *Anthonomus grandis* 8854.
- Salinity**, effects on body size, fecundity, *Aedes dorsalis* 8223.
effects on growth, infection, pathogens, *Leguminifera giganteum*, *Aedes taeniorhynchus* 6606.
- Salinity effects**, cuticle permeability, osmoregulation, *Cenocirca bifida hungerfordi* 978.
parasites infectivity, *Nematoda*, *Culicidae* 266.
population dynamics, larvae development, *Anopheles menus*, Kenya 3616.
water absorption, vesicles, *Tomocerus*, *Orchessella villosa* 3365.
- Saliva**, anti-hemostatic components, activity, thromboxane A₂, *Rhodnius prolixus* 7361.
electronic equipment, measurements, *Nephotettix ciucipicus* 1699.
growth regulators, *Brachystola magna*, effects on, *Bouteloua gracilis* 2058.
serotonin, histamine, antagonism, *Rhodnius prolixus* 3385.
- Salivary gland**, anatomy, histology, secretions, *Reduviidae* 252.
Anopheles sinensis, sex chromosomes, chromosome 3, chromosome 2 structure 9410.
antigens, biological control, pest resistance, *Dermacentor andersoni* 6058.
calcium transport, membranes, *Phormia regina* 1798.
cells, fluorescence, mutants, circadian rhythms, *Drosophila melanogaster* 4982.
cells, ribosomes, cistrons, *Drosophila mulleri*, *Drosophila arizonensis* 5446.
cellulase activity, *Protozoa*, *Mastomys darwiniensis* 5931.
chromosomes, Balbian rings, restriction endonuclease mapping, DNA nucleotide sequence, *Chironomus tentans* 7830.
chromosomes, characterization, *Culex vishnui* 1518.
chromosomes, gene expression, RNA biosynthesis, *Chironomus tentans* 3873.
chromosomes, karyotypes, *Melanogromyza obtusa*, India 5466.
chromosomes, mapping, *Chrysomya megacephala* 1501.
chromosomes, nucleolus organizer region, activation, *Drosophila* 5452.
chromosomes puffing, ecdysterone, genetic control, *Drosophila melanogaster* 7821.
chromosomes, puffing, heat shock, *Rhynchosciara americana* 7837.
chromosomes, puffing, heat shock, *Drosophila melanogaster* 2310.
chromosomes, puffing, protein biosynthesis, *Drosophila hydei* 5447.
chromosomes, *sgs-4* localization, *Drosophila melanogaster* 2307.
cytology, secretion, ultrastructure, host-parasite interactions, vectors, *Rhipicephalus appendiculatus*, *Theileria parva* 256.
digestive enzymes, enzymatic activity, *Haematobia irritans* 185.
dissection, methodology, *Glossinidae* 4080.
DNA biosynthesis, *Bradyia spatterium* 1540.
DNA, characterization, *Bradyia spatterium* 3883.
cDNA hybridization, mRNA, *Chironomus tentans* 7829.
ducts, fluids transport, *Aedes aegypti* 7362.
ecdysone interaction, loci, chromosomes, *Drosophila melanogaster* 2320.
extraction, methodology, *Simulium* 67.
heat shock effects on chromosomes puffing, *Chironomus tentans* 7828.
heat shock proteins, gene expression, *Drosophila* 8634.
heterochromatin, polytene chromosomes, *Drosophila mulleri*, *Drosophila arizonensis* 5464.
histology, mitochondria, ATP levels, *Chironomus tentans* 4952.
hydrolysis phosphatidylinositol, calcium channels, *Insecta* 4950.
hypertrophy, infection, *Glossina pallidipes*, Kenya 8141.
hypertrophy, virus-like particles transmission, *Glossina pallidipes* 8140.
infection, *Kayado fino virus*, *Dalbulus maidis* 5037.
larvae, protein biosynthesis, gene expression, *Chironomus thummi* 3880.
localization, *luteovirus*, disease transmission, *Myzus persicae* 8148.
morphology, toxins, *Ixodes holocyclus* 1800.
parasites, pathology, morphology, *Babesia microti*, *Ixodes ricinus* 1005.
parasites, sporogony, ultrastructure, *Theileria parva*, *Rhipicephalus appendiculatus* 9007.
pathogens, disease transmission, *Trypanosoma brucei*, *Glossina morsitans* 3674.
pathogens, viruses, *Triatoma infestans* 3421.
polytene chromosomes, DNA, structure, *Chironomus plumosus* 7847.
polytene chromosomes, karyotypes, *Anopheles* 9408.
polytene chromosomes, replication, *Drosophila nasuta* 4677.
protein biosynthesis, development, larvae, *Drosophila melanogaster* 8111.
protein biosynthesis, developmental stages, puffing, *Chironomus tentans* 2302.
proteins, biochemical characteristics, larvae, *Chironomus tentans* 6551.
ribosomes, electron microscopy, *Chironomus tentans* 4675.
RNA biosynthesis, nucleic acids, puromycin effects on, *Chironomus thummi* 3882.
RNA biosynthesis, transport, *Lygus* 3072.
role, feeding, disease transmission, *Ixodidae* 2917.
secretion, chemical composition, *Glossina morsitans* 983.
secretion, larvae, *sgs-4*, X chromosome, *Drosophila melanogaster* 2311.
secretion, osmoregulation, saliva, cells, physiology, *Rhipicephalus appendiculatus* 257.
secretion, proteins, ecdysone effects on, *Manduca sexta* 2610.
secretions, infection effects on, *Trypanosoma brucei*, *Glossina morsitans* 8155.
transcription, RNA biosynthesis, *Chironomus thummi* 5019.
tyrosine aminotransferase, purification, characterization, antibodies production, *Drosophila hydei* 932.
- Salmonella**, isolation, public health, *Blattidae*, India 6076.
- Salmonellosis**, vectors, urban environment, man, *Insecta* 6885.
- Salt marshes**, abundance, distribution, *Chrysops atlanticus* 2151.
abundance, ecological distribution, inland water environment, *Culicidae*, USA, Virginia 8610.
abundance, ecological distribution, polymorphism, *Delphacidae*, USA, Florida 6833.
abundance, *Hemiptera*, *Homoptera*, USA, Florida 5241.
community composition, *Insecta*, herbivores, nutrient enrichment, *Spartina* 2290.
control programs, efficiency, quantitation, methodology, *Culicidae* 1351.
control programs, habitat alterations, control programs, vectors, disease transmission, *Culicidae*, USA, Georgia, Glynn Co. 1437.
habitat, bionomics, *Hydrochara occulta* 8281.
islands, biogeography, recolonization, *Arthropoda*, USA, Florida Coast 5264.
oviposition, flight activity, *Hybomitra damcke*, USA, New Jersey Coast 6710.
parasites, eggs, *Macrosteles surfacei*, *Orchelimum fidicinum*, USA, Florida 5187.
parasitoids, developmental stages, *Prokelisia marginata*, USA, Florida, Oyster Bay 4368.
surveys, fauna, *Coleoptera*, USA, Florida 3622.
- Salvatoria**, distribution, species composition, habitat, British Isles 6305.
surveys, species composition, British Isles 6301.

- Salticidae**,
new records, predators, *Spodoptera litura*, India, Andhra Pradesh 1439.
new species, taxonomy, morphology, *Euphydryx evae*, India 801.
systematics, use, display, courtship, agonistic behavior 8731.
types, morphology, taxonomy 8734.
vision, predatory behavior, predatory aggression, literature reviews 3569.
- Salticidae**,
parasitism, oviposition; *Epipompilus inularis* 6756.
- Salticidae scenicus**,
intraspecific relationships, fighting 1195.
- Salts**,
chemoreceptors, taste perception, larvae, *Drosophila* 4141.
effects on infestation, fishery products, *Suidasia medialis* 2949.
food preferences, chemoreception, reproduction, females, *Phormia regina* 7296.
- Salvelinus fontinalis**,
predators population decline, effects on species composition, benthos, streams, Insecta 8613.
- Salvia moerchiana**,
infestation, roots, *Protomassalia*, new species, India, Kashmir 1641.
- Salvinia molesta**,
aquatic plants, weed control, biological control, *Cyrtobagous singularis* 5316.
- Sameodes albiguttalis**,
weed control, biological control, *Eichhornia crassipes*, USA, Florida 692.
- Samia cynthia ricini**,
circadian rhythms, ecdysone release, prothoracic gland 8980.
larvae, pupae, development, hormones, prothoracicotropic hormone, circadian rhythms 3466.
- Samoria**,
new genera, taxonomy 5561.
- Samoria fastuosa**,
new species, taxonomy, morphology 5561.
- Samoria speciosa**,
new species, taxonomy, morphology 5561.
- Samplers**,
aquatic organisms, methodology, Coleoptera 4918.
catching methods, aquatic animals, crop fields, Insecta 5624.
catching methods, emergence traps, larvae, Insecta 4667.
containers, design, Insecta 1689.
design, *Hyalomma anatolicum excavatum* 1698.
leaf litter habitat, Chilopoda 2478.
- Sampling**,
aerols, aerosols, webs, Araneae 8469.
catching methods, carbon dioxide, dry ice, *Amblyomma americanum* 3246.
cluster analysis, stratification, interspecific relationships, orchards, Aphididae 4666.
demography, carrion traps, Arthropoda 1694.
distribution, host plants, *Tetranychus cinnabarinus*, *Codiaeum variegatum* 2084.
eggs, pest control efficacy, *Heliothis armigera* 1692.
equipment, *Hypera* meles 8022.
house dust, Acari 4489.
instruments, methodology, Acari 1683.
methodology, cattle parasites, *Hypoderma lineatum*, *Hypoderma bovis* 1681.
methodology, colonies, *Ecton burckelli* 5613.
methodology, comparison, larvae, *Lepidoptera* 5131.
methodology, crop fields, Arthropoda 5617.
methodology, crop fields, *Diabrotica longicornis*, *Zea mays* 6120.
methodology, crop fields, efficiency, *Acyrtosiphon kondoi* 4071.
methodology, crop fields, pest management, Arthropoda 3237.
methodology, distribution, fruit trees, *Aleurocanthus woglumi*, USA, Florida 1298.
methodology, flight activity, life cycle, *Euxoa scandens* 6094.
methodology, grasslands, Arthropoda 5617.
methodology, larvae, *Microperla*, British Isles, England 4919.
methodology, *Lycopersicon* crop fields, *Heliothis zea* 8529.
methodology, parasites, population studies, *Ooencyrtus kuvanae* 2821.
methodology, pest control, integrated control 4533.
methodology, pests, abundance, *Thrips tabaci* 4534.
methodology, pests, crop fields 4629.
methodology, pests, crop fields, *Empoasca fabae*, *Medicago sativa* 8470.
methodology, pests, infestation, *Coleotechnites*, *Pinus jeffreyi* 8559.
methodology, population density estimation, *Rhinocyllus conicus* 1695.
methodology, population density, *Glossina morsitans*, Niger, Mozambique 1281.
methodology, population density, larvae, crop fields, *Anicarsia gemmatilis* 6114.
methodology, population levels estimation, *Stomoxys nigra* 46.
methodology, population levels, *Phlebotomus aznari*, *Phlebotomus perniciosus* 59.
methodology, population levels, population dynamics, *Glossina morsitans*, *Glossina pallidipes* 5274.
methodology, predators, crop fields, Insecta, *Glycine* max 6145.
methodology, soil, *Scaptomyza aetulus*, *Scaptomyza vicinus* 4072.
methodology, sound traps, *Scaptomyza aetulus*, *Scaptomyza vicinus* 4075.
methodology, spatial distribution, crop fields, *Pseudaletia unipuncta*, USA, Maryland 6113.
methodology, spatial distribution, host plants, *Trichoplusia* n1 6107.
methodology, spatial distribution, population levels, *Hypera posica*, *Sitona hispidulus*, *Hypera punctata* 5626.
methodology, statistical analysis, crop fields, *Tetranychus urticae*, *Mentha* aperta 8505.
methodology, traps, *Lygus lineolaris* 6108.
methodology, trees, species composition, Insecta 6842.
methodology, trophic relations, soil fauna, predators 8660.
methods, capture-recapture studies, population density estimation, Lincoln Index, *Dacus oleae* 5621.
natural enemies, abundance, *Myzus persicae*, *Coleomegilla maculata* 584.
pests, attractants, *Atherigona*, *Atherigona soccata* 4077.
pests infestation, vegetables, *Lepidoptera* 2196.
pests, spatial distribution, host plants, *Brevicoryne brassicae*, *Myzus persicae*, USA, California, Orange Co. 8358.
pheromone traps, *Orgyia thyellina*, *Orgyia recens*, *Orgyia antiqua* 5614.
pheromone traps, pests, *Spodoptera frugiperda*, Canada, Ontario 8555.
pheromone traps, surveys, geographical distribution, *Diprion similis*, USA, North Carolina 8552.
population dynamics, mortality, longevity, *Melanoplus sanguinipes* 5994.
population studies, adults, abundance, *Agromyza frontella* 3238.
population studies, crop fields, *Plagiognathus arbutorum*, Sweden 3807.
population studies, pheromone traps, *Scolytus multistriatus* 2228.
population studies, population dynamics, *Heteronychia arator*, New Zealand, North Is. 1300.
- Sampling, (continued)**
preservation, methodology, Chalcidoidea 4096.
pupae, population levels, predators effects on, *Choristoneura fumiferana* 5996.
species composition, attractants traps, *Neuroptera* 1686.
traps, larvae, *Agrotis ipsilon* 8028.
traps, mortality, *Apocrita* 5615.
- Sampling methods**,
crop fields, *Myzus persicae*, *Brevicoryne brassicae*, *Hyadaphis erysimi*, *Macrosiphum euphorbiae*, USA, California 9349.
eggs, larvae, adults, *Spentophorus parvulus* 8867.
parasites, pupae, *Musca domestica*, *Stomoxys calcitrans*, *Hymenoptera* 8857.
Sampsonius sulcatus,
new species, Trinidad 806.
Sancassania berselei,
pesticide resistance, biodegradation, paraoxon, parathion 308.
Sandaracopimaric acid,
feeding behavior deterrents, host plants, *Psithophora erichsonii* 623.
Sanderellus panamensis,
new species, taxonomy, morphology, Panama 6421.
Sandia macfarlandi,
habitat, life history, USA, West 7513.
Sandrocottus dejeani,
neurosecretion, optic lobe, cytology, histology 4180.
- Santization**,
social behavior, excretory products distribution, colonies, *Mallos gregalis* 2143.
vectors, disease transmission, tropical environment, *Culex pipiens* 1356.
- Sapintus pallidus**,
surveys, West Indies 1612.
- Sapintus suzeiae**,
new species, West Indies 1612.
- Saprinus**,
predators, developmental stages, mortality, *Musca venustissima*, Australia 2880.
- Saprophagy**,
biodegradation, assimilation, *Armadillidium vulgare* 159.
- Sargya pumila**,
host-parasite interactions, traps, crop protection, color, catching methods, attractants, site location, *Megachile rotundata* 718.
- Sarwak**,
new species, taxonomy, morphology, *Thagria mutabilis*, *Thagria bifurcata*, *Thagria barbata*, *Thagria retrota*, *Thagria hollowayi* 8808.
- Sarcophaga**,
diapause: sex ratio, breeding success, population dynamics 3605.
ecdysone: metabolism, regulation 3344.
thermoregulation: cuticle, blood flow, ecophysiology 6580.
- Sarcophaga albiceps**,
digestive tract, enzymes, carbohydrates 7311.
- Sarcophaga argyrotoma**,
diapause: photoperiod effects on, circadian rhythms 5815.
- Sarcophaga bullata**,
chemoreception, leg transplants, *Aedes* 2535.
cuticle: larvae: proteins, biochemical analysis, cross-linking 884.
larvae: development: respiratory system 919.
larvae: hemolymph hormones: effects on immobilization 204.
molting hormones: radioimmunoassay: larvae 2711.
molting hormones: role: coarctation: developmental stages 1361.
molting: juvenile hormones, fat body ultrastructure, vitellogenesis 2721.
protein biosynthesis, vitellogenin, molting hormones, 20-hydroxy-ecdysone, males 3367.
- Sarcophaga falculata**,
toxicity, *Buthus judacis* venom 5054.
- Sarcophaga formosana**,
synonymy, taxonomy, *Sarcophaga longicornis* 4835.
- Sarcophaga lineatocollis**,
neurosecretion cells, ganglia, larvae 2526.
- Sarcophaga longicornis**,
synonymy, taxonomy, *Sarcophaga formosana* 4835.
- Sarcophaga peregrina**,
fat body, protein storage, melanomorphosis 3318.
sivage proteins, mRNA identification 8088.
- Sarcophaga ruficornis**,
gluconeogenesis, glucose metabolism, melanomorphosis 3329.
oogenesis, yolk, chemical composition, histochemistry, proteins 1083.
ovary development, thiopepa effects on 356.
- Sarcophagidae**,
diapause, pupae, metabolism, juvenile hormones 3477.
geographical distribution, new records, check lists, Korea 3147.
new species, new genera, China, People's Rep. 24.
symbionts, man, species composition, Calliphoridae 9259.
- Sarcoplasmic reticulum**,
calcium uptake, muscles, *Blaberus fuscus* 112.
- Sarcoptes**,
parasites, detection methodology 2483.
- Sarcoptes scabiei hominis**,
diagnosis, symptoms, parasites 9269.
- Sarcoptes scabiei**,
antigenic relationship, Dermatophagoides farinae 1381.
case reports, Jamaica 6061.
case reports, man, herpes genitalis association 3696.
disease transmission, scabies 1330.
host-parasite interactions, pathology, immunological aspects 3671.
hypersensitivity (immediate), man, immunoglobulin E serum levels 4485.
infection, effects on immunoglobulins, man 8404.
infestation, treatment, skin diseases, Ovis, Sudan 2924.
medical importance, diagnosis, ova hatching 3668.
medical importance, skin diseases, man 2932.
parasites, chemical, control, karanj oil, Capra 8407.
parasites, disease transmission, Canidae 1331.
parasites, life history, man 662.
parasites, wildlife, *Urocyon cinereoargenteus*, USA, Pennsylvania 5193.
scabies, case reports, Norway 8426.
skin diseases, case reports, Ethiopia 5273.
skin diseases, domestic animals, incidence, treatment, Sudan 2923.
- Sarcoptes scabiei var hominis**,
new records, parasitism, Canis familiaris 7638.
- Sarcophilidae**,
scabies, case reports, man, immunology 3691.

- Sarcotachina**, taxonomy, morphology 4840.
Sarcus metallinus, chromosome number 2431.
Sardalia, new species, taxonomy, morphology, *Paragus ascoensis*, *Paragus antioinetae* 8793.
Seropogon hui, new species, taxonomy, morphology, India 7184.
Serracenia purpurea, feeding behavior, food organisms, carnivores, *Drosophila melanogaster* 1255 host plants, interspecific relationships, *Endotheria daeckiana*, Canada, Quebec 4328.
Sesacarus locae, taxonomy, new species, morphology, parasites, *Lestros inca*, Peru 1587.
Sesatrombicula umbolensis, new species, taxonomy, morphology, Papua New Guinea 8728.
Sesacus ghyphochela, new species, taxonomy, morphology, Brazil 8736.
Sesaspes, taxonomic revision, morphology 7232.
Satchelliella nubila, karyotypes, meiosis, chromosomes 3896.
Satchelliella opaca, karyotypes, meiosis, males 2329.
Satchelliella trivialis, geographical distribution, Germany, Fed. Rep. Bavaria, Murnauer Moos 4730.
Satchelliella vallanti, new species, taxonomy, morphology, Italy, Bormida R. 3192.
Satellite DNA, isolation, characterization, *Drosophila simulans* 3058 nucleotide sequence, distribution, nuclei, embryos, *Drosophila virilis* 3874 restriction endonuclease mapping, *Drosophila nasutoides* 4665.
Satellites, solar power, environmental impact, microwave radiation, longevity, food consumption, *Apis mellifera* 7502.
Saturation, capture efficiency, pheromone traps, *Choristoseura* 1679.
Saturia, phylogeny, taxonomy, *Agapenna* 7864.
Saturia mendocino, hybridization, taxonomy, *Saturia walterorum* 7864.
Saturia pavonia, geographical distribution, new records, British Isles 6300.
Saturia walterorum, hybridization, taxonomy, *Saturia mendocino* 7864.
Saturiidae, embryos, gene expression, development regulation 3884.
Saturiidae, Chromosomes, gene mapping 1491.
Satyrilum calanus, habitat, life history, USA, West 7513.
Satyrilum calanus falacer, morphology, aberrants, USA, New Jersey 7276.
Saudi Arabia, pests, stored products, surveys, *Insecta* 3738.
Saturation, predation, pest control, insectivores, mosquito larvae, *Aphanius dispar* 563.
Sauskran, damage, contamination, *Thrips tabaci* 8508.
Savannahs, habitat preferences, resting behavior, *Glossina tachinoides*, Africa, West 9185.
leaf litter decomposition, role, *Isoptera*, South Africa 9199.
seamant environments, soil fertility, vegetation, *Macrotermes michaeliensis* 5988.
Scab, sheep, disease control, diazinon, *Psoroptes communis* 646.
Scabies, association, herpes genitalis, man 3696 case reports, man, *Sarcoptes* 3691 case reports, Norway 8426 case reports, *Sarcoptes scabiei*, Jamaica 6061 case reports, treatment 648 disease control, domestic animals, ivermectin, *Psoroptes ovis* 6892 disease transmission, *Sarcoptes scabiei* 1330 infection, effects on immunoglobulins, man, *Sarcoptes scabiei* 8404 infestation, cattle susceptibility, *Psoroptes ovis* 2170 man, hypersensitivity (immediate), immunoglobulin E serum levels 4485 skin diseases, case reports, Ethiopia 5273 symptoms, histology, man 2185.
Scales, scents, ultrastructure, *Lepidoptera* 7268.
Scambus brevicornis, eggs, larvae, morphology 8040 parasitoids, host-parasite interactions, ecological distribution, altitude, *Coleophora alticola* 4371.
Scandianvia, entomofauna, *Eviphididae* 4709 geographical distribution, habitat, species composition, *Orthoptera* 6318 new records, *Nossidium pilosellum* 7433 new species, taxonomy, morphology, *Fannia stigi* 7971.
Scanning electron microscopy, embryos, molting, *Oncopeltus fasciatus* 868.
Scaphandrea, population studies, hybrids, morphology, USA, Colorado 7063.
Scaphytopius acutus, X disease vectors, factors affecting orchards colonization 6173 vectors, feeding behavior, food preferences, *Prunus persica*, *Trifolium pratense* 526.
Scaphytopius biflavus, new species, taxonomy, morphology, Costa Rica, Cocos I. 7981.
Scaphytopius californiensis, development, interspecific hybridization, *Scaphytopius nitridus* 8220.
Scaphytopius nitridus, development, distribution 8220.
Scaptiscus aetetus, sampling methodology, sound traps 4075.
Scaptiscus aetetus, enzymes, oxidases, activity, microsomes, seasonal variations 5694.
Scaptiscus aetetus, (continued) food preferences, food availability 2008 geographical distribution, USA, Southeastern states 2360 landing behavior, orientation, phonotaxis 1926 mating, overwintering, spermatozoa storage, USA, Florida 5148.
Pasture damage, *Paspalum notatum* 4573.
sampling methodology, soil, abundance, distribution 4072.
Scaptiscus vicinus, enzymes, oxidases, activity, microsomes, seasonal variations 5694 food preferences, food availability 2008 geographical distribution, USA, Southeastern states 2360.
Pasture damage, *Paspalum notatum* 4573 sampling methodology, soil, abundance, distribution 4072 sampling methodology, sound traps 4075.
Scaptotrigona postica, antennal sensilla, ultrastructure, chemoreceptors 6532 colonial characteristics, workers, males, differentiation 7001.
Scaptotrigona xanthotricha, genetic load, sex alleles 5495.
Scarabaeidae, activity patterns, seasonal variations, India 5255 competition, interspecific relationships, *Popillia japonica*, USA, North Carolina 600.
Compound eyes, eye lens, optical properties 134.
milky disease, pathogens, infectivity, *Aphodius tasmaniae* 624.
pest outbreaks, crop fields, *Saccharum officinale*, India 5361.
pest outbreaks, pest control, India, Maharashtra 5362.
predation, parasites biological control, *Taenia saginata*, Kenya 1317.
taxonomy, fossils, synonymy, paleontology, USA, California 2404.
Scarabaeinae, attractancy, feces, *Reptilia*, *Amphibia*, Panama 5134.
new species, taxonomy, morphology, geographical distribution, Panama 6376.
Scarabidae, geographical distribution, new records, Brazil 4109.
Scarites substriatus, predators, pests biological control, *Hypera postica*, *Sitona hispidula* 612.
Scaroidana blockeri, new species, taxonomy, morphology, South America 7982.
Scatella picea, feeding ecology, food preferences 3869 habitat adaptations, littoral zone, freshwater environments 6861.
Scathophaga stercoraria, assessment strategy, aggressive behavior, environmental factors, reproductive behavior, resource allocation 1143 territorial behavior, mating behavior, size effects on 410.
Scatophaga stercoraria, breeding success, resource availability, oviposition, population density, males 6857.
Scatopse, keys, morphology 6409.
Scatopse globulicauda, new species, taxonomy, morphology, Europe, Alps 6409.
Scatopse notata, morphology 6409.
Scatopsidae, geographical distribution, new records, Sweden 3945.
Scelio fulgidus, parasites, dispersal, wind 4451.
Scellionidae, parasitoids, siblings, mating, sex ratio 3609.
Scellium assimile, females, energy output, body size, fecundity, population dynamics 1075.
maternal behavior, nest building, body weight, fecundity 1905.
Sceliphron madraspatanum conspiciendum, feeding behavior, food preferences, *Arachnida* 2806.
Scenopinus, morphology, keys, species, Israel 5650.
Scenopinus afghanistanensis, new species, taxonomy, morphology, Afghanistan 7973.
Scenopinus gobiensis, new species, taxonomy, morphology, Mongolia, People's Rep. 7973.
Scenopinus kazabi, new species, taxonomy, morphology, Mongolia, People's Rep. 7973.
Scenopinus maculosus, new species, taxonomy, morphology, Mongolia, People's Rep. 7973.
Scenopinus mariensis, new species, taxonomy, morphology, USSR, Turkmenia 7973.
Scent gland, oils, biochemical analysis, *Oncopeltus fasciatus*, *Pyrrhocoris apterus* 3377.
Scent marking behavior, chemical communication, foraging behavior, *Bombus vosnenskii* 1925 foraging behavior, *Apis mellifica* 5869 sex pheromone, trail pheromone, *Pseudococcus calceolariae* 1932 territorial behavior, aggressive behavior, *Polistes nimpha* 5156.
Scents, scales, ultrastructure, *Lepidoptera* 7268.
Schedorhinotermes breinlii, nests, morphology, queens, Australia 1482.
Schedorhinotermes lamanianus, defence secretions, toxins, biochemical analysis 3383.
Schedorhinotermes scellus, nests, morphology, Australia 1482.
Schelioribes albialatus, abundance, soil properties effects on, plantations 5249.
Schelioribes praenicius, vegetation effects on soil fauna, community structure, India, West Bengal, Santaniketan 4442.
Schenklingia bhauniki, new species, taxonomy, morphology, India 7160.
Schenklingia heteropunctata, new species, taxonomy, morphology, India 7160.
Schenklingia himalayensis, new species, taxonomy, morphology, India 7160.
Schinia mifis, attractancy, interspecific relationships, *Spodoptera eridania* 5120 life history adaptations, host plants flowering, *Pyrrhocappus* 6790.

- Schistocerca gregaria**,
N-acetyl dopamine biosynthesis, nervous system 1734.
developmental stages, amino acid composition, metabolism 1752.
- Schistocerca**,
mating behavior, neurophysiology, abdomen, rhythms 3278.
- Schistocerca americana**,
cholesterol, incorporation, ecdysteroids, ovary, eggs, oogenesis 211.
- Schistocerca americana gregaria**,
visual perception, ocelli neurons, effects on orientation 909.
- Schistocerca gregaria**,
antifeedants, food plants, Amariyllidoideae 7348.
antifeedants, food plants, Hymenocallis littoralis 7531.
antifeedants, plant extracts, neem oil, Azadirachtin indica 7347.
digestive tract, fluids, minerals, nutrient uptake, diets 2552.
digestive tract, fluids, nutrient uptake 2553.
DNA biosynthesis, polyloidization, fat body, growth, metamorphosis 7832.
eggs size, fecundity, age effects, crowding effects on 4276.
embryogenesis, ecdysteroids levels 7331.
feeding behavior, regulation, sucrose effects on 493.
females, accessory gland, development, secretion, juvenile hormones 2672.
flight activity, environmental factors, wind, food, temperature 1171.
flight muscle mitochondria, lipid composition, temperature effects on 8105.
flight muscle mitochondria, temperature effects on lipid composition, phase transition 5709.
food preferences, host plants, *Pteridium aquilinum* 1245.
hemolymph, sodium, potassium, sex differences 6571.
immune response (humoral), parasites, *Hymenolepis diminuta* 1010.
intestinal microflora, distribution, abundance, *Streptococcus*, *Enterobacter agglomerans* 2012.
mechanoreceptors, leg, innervation, peripheral nervous system, central nervous system 8905.
mechanoreceptors, sensilla, spatial distribution, thorax, leg 910.
microbiocidal activity, methyl-para-hydroxy benzoate, effects on survival 5821.
midgut, permeability, cardiac glycoside 7310.
molting, cuticle physical properties, hormones effects on 2517.
muscles, glutamate uptake, venom effects on, *Phantherus triangulum* 5768.
nervous system, guanylnucleotides, adenylate cyclase, monoamine 6526.
nervous system mapping methodology, cobalt 8444.
neuromuscular junctions, presynaptic acetylcholine receptors, characterization 8908.
proteins, calmodulin, biochemical analysis 3335.
tryptophan pyrrolase activity, fat body 8938.
water uptake, gut, characterization, localization 232.
wings shape, aerodynamic properties 7287.
- Schistocerca gregaria**,
reproductive organs, accessory gland, development 5062.
- Schistopterum moebiusi**,
mating behavior 9070.
- Schistotephe decussata**,
parasites, morphology, Tachinidae 5189.
- Schizaphis graminum**,
cholinesterase activity, characterization 8949.
- Schizaphis graminum**,
barley yellow dwarf virus detection, serological tests 6611.
biotypes, surveys, Triticum crop fields, USA, Texas 3761.
developmental stages, morphology 6485.
disease transmission, barley yellow dwarf virus 8468.
dispersal, flight activity, pests, crop fields 3770.
feeding behavior, host plants, pest resistance, Sorghum bicolor 6096.
feeding, effects on host plants antisos 2054.
feeding, effects on, yield, sorghum 727.
fertilizer applications, effects on population dynamics, damage, Sorghum bicolor 8510.
host plants, feeding deterrents, Sorghum bicolor 5294.
host plants, pest resistance, breeding, Triticum 3717.
host plants pest resistance, Triticum aestivum 2986.
infection, viruses transmission 2178.
pest resistance, biochemistry, Sorghum bicolor 4564.
pest resistance, host plants, Avena 2835.
pest resistance, host plants, Avena sativa 9314.
pest resistance, host plants, genotypes, Sorghum 6153.
pests, abundance, temperature effects on, grazing, USA, Oklahoma 6922.
population dynamics, environmental effects, crop fields, Sorghum, USA, Missouri 6151.
viruses transmission 4195.
- Schizocosa oreata**,
acoustic communication, reproductive behavior 3541.
ecological distribution, edge effect 1936.
- Schizocosa roseni**,
acoustic communication, reproductive behavior 3541.
- Schizotetranychus pineti**,
anti-predator behavior, aggregation behavior, social behavior, predator-prey interactions, Spididae 8293.
- Schizotetranychus**,
pests, new records, attack, host plants, Crotalaria spectabilis 7675.
- Schizotetranychus celarius**,
symptomatic populations, comparison, morphology, nesting behavior 4465.
- Schistocerca gregaria**,
new genera, new species, fossils, France 1623.
- Schoenfeldtiopsis zikani**,
new species, taxonomy, morphology, Brazil 7157.
- Schoengastia**,
synonymy, Radfordiana, Papua New Guinea 4763.
- Schoengastia bioxaline**,
Acari, new species description, Papua New Guinea 6.
- Schoengastia lanceolata**,
new species, taxonomy, morphology, Papua New Guinea 6339.
- Schoengastia niohe**,
new species, taxonomy, morphology, Papua New Guinea 4763.
- Schoengastia ruberi**,
new species, taxonomy, morphology, Papua New Guinea 6339.
- Setaria coprophila**,
RNA biosynthesis, DNA methylation, polytene chromosomes 7833.
- Scleridae**,
new records, geographical distribution, new species, USSR 6396.
- Scionyzidae**,
geographical distribution, morphology, Belgium 9485.
taxonomy, morphology, synonymy 4825.
- Scirpophaga**,
kaumones effects on parasites oviposition, Tetrastichus schoenobii 1218.
taxonomy, revision, synonymy 1662.
- Scirpophaga excerptalis**,
taxonomy, revision, synonymy 1662.
- Scirpophaga incertulas**,
chemical control, insecticides, carbosulfan, diazinon, quinalphos, efficacy 7771.
population density, spatial distribution, crop fields, agricultural practices effects on, Oryza sativa 6947.
- Scirpophaga kumatai**,
new species, taxonomy, morphology, Nepal 7221.
- Scirpophaga nepalensis**,
new species, taxonomy, morphology, Nepal 7221.
- Scites orbiculatus**,
pheromone traps, sex pheromone, Trichoplusia m 1787.
- Scitotrips**,
10 species, pests, host plants, range, geographical distribution 1261.
- Scitotrips dorsalis**,
vectors, disease transmission, tomato spotted wilt virus 6909.
- Sciurus carolinensis**,
new records, predation, pupae, Anthera polyphemus, Attacus atlas, USA, Wisconsin 5265.
- Sclerites**,
morphology, Tortricidae 5653.
- Sclerotium asteris**,
symbiosis, oviposition inhibition, parasitoids, Asteromyia carbonifera, Tormys capite 8309.
- Sclerotization**,
cuticle, biochemical characteristics, Locusta migratoria 6520.
proteins structure, pupae, Diptera 8943.
- Scodra calceata**,
molting glands, histology 258.
- Scotidae**,
abundance, phenology, geographical distribution, USA, Texas, Rio Grande Valley 1975.
- Scotiophthalmus**,
pests abundance, seasonal variations, Sorghum, Nigeria 4560.
- Scotianites orion**,
new records, geographical distribution, Iberian Peninsula 7078.
new records, geographical distribution, Spain 3138.
- Scotopendridae**,
taxonomy, morphology, museum collections 4068.
- Scotytidae**,
cellulose digestion, enzymes 4156.
host selection, colonization, pheromones, kaumones, allomones, reviews 6684.
natural selection, communication 4699.
new records, geographical distribution, West Indies 7167.
parasites, natural enemies, Hymenoptera, Israel 4372.
pests abundance, pest control, Persea trita 1454.
pheromone traps, efficacy, lures, attractancy, Pteropax 3803.
pheromones, traps, catching methods 64.
- Scotytoidae**,
peccis, species composition, ecological distribution, South America 7722.
- Scotytus**,
parasitism, drought effects on, Conterales, USA, California 4394.
- Scotytus multistriatus**,
antennal sensilla, morphology, 7297.
biological control, pheromone traps, attractants 1464.
chemotransformation, topical application, tepe, hempa, N,N'-hexamethylenebis 8234.
development, breeding sites, host plants, Ulmus procera 6195.
Dutch elm disease vectors, biological control, Pseudomonas syringae 4526.
host plants attractancy, y ndaion effects on 8968.
host-parasite interactions, mortality, Neoplectana carpocapsae, Heterorhabdus bacteriophori 599.
hosts, biological control, parasites, Dendrocterus protuberans 2017.
mortality, fumigation, methyl bromide, wood, Ulmus 8491.
new records, geographical distribution, Ireland 4707.
pest control, pheromone traps, population studies 2228.
vectors, wood, attraction comparison, Ulmus procera 2062.
- Scotytus scolytus**,
antennal sensilla, morphology 7297.
biological control, pheromone traps, attractants 1464.
- Scotytus tsugae**,
occurrence, abundance, pheromone traps, Canada 1183.
- Scotytus ventralis**,
fungi transmission, infection, monoterpenes accumulation, Abies grandis 8473.
infestation, mortality, Conterales, USA, Colorado 7551.
- Scopeus fageli**,
new species, morphology, Ivory coast 1603.
- Scopeus girardi**,
new species, morphology, Ivory coast 1603.
- Scopeus pusillus**,
new records, geographical distribution, German Dem. Rep., Potsdam, Rietzer See 4711.
- Scopeus yemenicus**,
new species, Yemen 3187.
- Scorpiones**,
toxicology, stings, effects on man, Switzerland 658.
treatment, bites, stings 629.
venom, envenomation, case surveys, Tunisia, man 8417.
venom, poisoning, man 8183.
- Scorpioidae**,
central nervous system, ultrastructure, blood-brain barrier 902.
neurotoxins, receptors, development, neurons 8209.
stings 664.
- Scorpionidae**,
taxonomy, morphology, Ceylon 4770.
- Scotia segetum**,
adaptations, sexual reproduction, environment conditions, geographical variations 1861.
magnesium, food intake, effects on development, reproductive systems, larvae 7442.

- Scotiomyia**, taxonomic revision, genera, synonymy, North America 2390
- Scotocryptini**, association, phoresy, Meliponinae, Panama 5227
- phoresy, reviews, Meliponinae, Neotropical Region 9130
- Scotogramma trifolii**, pathogens, new records, characterization, rickettsia-like disease 8169
- pheromone traps, sex pheromone, attractants, catches, variations, Canada, Manitoba 4337
- Screening**, pest resistance, host plants, *Vigna unguiculata*, *Maruca testulalis* 3721
- pest resistance, *Solanum tuberosum*, *Phthorimaea operculella* 3824
- Scrobipalpa stibbidae**, new species, taxonomy, morphology, Iraq 6444
- Scutacarus myrmecophilus**, new species, taxonomy, morphology, Poland 4761
- Scutacarus ovoideosinilis**, new species, taxonomy, morphology, Poland 4761
- Scutelleridae**, overwintering behavior, ecological distribution, USA, South Carolina 455
- Scutellista cyanea**, parasites, new records, eggs, *Parasaissetia nigra*, India, Maharashtra 7540
- Scydamaenus**, new species, taxonomy, morphology, Ecuador, Guatemala 7936
- Seymouria lividigaster**, diets, host plants, habitat utilization, Australia 6049
- life history, ecological distribution, Australia 2874
- seasonal variations, fat metabolism, body weight, dormancy, environmental effects, Australia 3327
- sex ratio, habitat effects on, Australia 2863
- Symnus**, abundance, nectar effects on, *Gossypium* 5971
- Symnus dorotae**, new species, taxonomy, Korea 785
- Symnus suturalis**, new records, geographical distribution, North America 6330
- Sebaceous gland**, infestation, man, case reports, *Demodex brevis* 3663
- Secale cereale**, crop fields, pest outbreaks, damage, *Mythimna separata*, India 6925
- Secochela**, new genera, taxonomy, morphology, South America 7976
- new genera, taxonomy, South America 5575
- Secochela liliei**, new species, taxonomy, morphology, South America 7976
- new species, taxonomy, South America 5575
- Secondary production**, environmental factors, *Parapsyche cardis*, *Diplectrona modesta*, USA, Georgia 2291
- population density, Heteroptera, Czechoslovakia 2139
- Secondary structure**, DNA, replication, termination, DNA polymerase I, *Drosophila melanogaster* 7831
- modification, chloroacetaldehyde, tRNA, nucleotide sequence, *Drosophila melanogaster* 4667
- peptides, cecropins, *Hyalophora cecropia* 7314
- rRNA, nucleotide sequence, splicing, *Drosophila melanogaster* 1499
- rRNA 5S, *Acyrtosiphon magnoliae* 4686
- rRNA 5S, *Bombyx mori* 3914
- rRNA 5.8S, silk gland, *Bombyx mori* 4177
- Secretion**, accessory gland, juvenile hormones, females, *Schistocerca gregaria* 2672
- β -N-acetylglucosaminidase, enzymatic activity, cell lines, *Culex quinquefasciatus*, *Drosophila melanogaster*, *Trichoplusia ni*, *Aedes pseudoscutellans* 96
- aedeagus, glands, males, *Tenebrio molitor* 4181
- cells, mandibular glands, ultrastructure, workers, *Apis mellifera* 4951
- Dufour's gland, cells, volatiles, biochemical analysis, *Colletes*, *Andrena*, *Lasiosagossus*, *Trachusa byssina* 244
- Dufour's gland, Hymenoptera, chemical analysis 988
- fibrin, silk gland, *Bombyx mori* 3376
- glands, post-pharyngeal gland, chemical composition, queens, *Solenopsis invicta* 6987
- honeydew, barley yellow dwarf virus, *Sitobion avenae*, *Metopolophium dirhodum* 4617
- integument exocrine glands, sex pheromone, Pentatomidae 985
- Malpighian tubules, environmental effects, hormones, stimulants, *Locusta* 2613
- milk, juvenile hormones effects on, *Diploptera punctata* 2589
- nectar, effects on feeding behavior, *Brassica campestris*, *Apis* 544
- neurosecretion cells, brain, ventral nerve cord, *Poecilocus pictus* 5666
- salivary gland, chemical composition, *Glossina morsitans* 983
- salivary gland, proteins, ecdysone effects on, *Manduca sexta* 2610
- serotonin induced, salivary gland epithelium, *Phormia regina* 1798
- silk, cocoons, larvae, *Gryphaena nana* 5016
- silk, methodology, *Araneae* 8856
- trail pheromone, sternal gland, *Trinervitermes bettonianus* 3374
- Secretions, (continued)**
- saliva, serotonin, histamine, antagonism, *Rhodnius prolixus* 3385
- salivary gland, anatomy, histology, *Reduvius* 252
- salivary gland, infection effects on, *Trypanosoma brucei*, *Glossina morsitans morsitans* 8155
- sternal gland, chemical communication, *Anuretus simoni* 2762
- trans-9-oxo-dec-2-enic acid, pheromones, queens, *Apis mellifera* 225
- Van der Vecht organ glands, life cycle, *Polistes federatus* 6592
- Sedimentation**, ash, streams, bioaccumulation, *Hesperoperla pacifica*, *Rhyacophila acropedes*, *Rhyacophila* vau, *Drumella* dolidi, *Rhithrogena robusta* 6236
- pollution effects, streams, Trichoptera, Diptera, Plecoptera, Ephemeroptera, USA, Appalachian Mts. 7815
- Sediments**, ice, benthos, overwintering, Trichoptera, Chironomidae, Sweden, Vindelälven R. 3648
- lakes, nitrogen, sulfur, environmental impact, burrowing organisms, Hexagenia 8601
- pollution effects, toxicity testing, methodology, deposit feeders, bioaccumulation, food chains 4314
- Seed set**, pollination, flowering phenology, *Linaria vulgaris*, Insecta 5203
- Seed treatments**, insecticides, chemical control, pests, Triticum, *Microtermes obesi*, India 5398
- insecticides, permethrin, chemical control, larvae, *Delia coarctata* 6133
- Seedlings**, damage susceptibility, lindane effects on, *Pinus sylvestris*, *Hylobius* 9315
- host plants, microorganisms, oviposition stimuli, *Hylenia antiqua* 5860
- pest resistance, morphology role, *Sorghum bicolor*, *Atherigona varia soccata* 7719
- survival, herbivores effects on, *Gutierrezia microcephala*, *Hesperotettix viridis* 7556
- Seeds**, collection equipment, food sources, rearing, *Oncopeltus fasciatus* 8025
- damage, effects on yield, germination, *Isopatra*, Triticum 5331
- damage, pests, *Abies alba*, *Eaomyia* impossible, *Eaomyia grusia*, Romania 6920
- dispersal, community structure, forests, Formicidae 3602
- extracts, effects on metamorphosis, *Azadirachta indica*, *Ceratitis capitata* 9153
- food preferences, feeding behavior, *Pogonomyia rugosus*, *Vermoseris pergandei* 2805
- Helianthus annuus*, infestation, *Neolasioptera helianthi*, larvae, Fungi 2074
- host plants, abundance, survival, *Hamamelis virginiana*, *Pseudanthrenus hamamelidis* 5969
- infestation, pest resistance, measuring techniques, *Pisum sativum*, *Bruchus pisorum* 8530
- insecticides, carbofuran, pest control, *Atherigona soccata*, *sorghum bicolor* 5358
- loss, feeding, pasture, *Telegoryllus commodus* 9303
- pests, damage, effects on quality, *Glycine max*, *Ceratomya trifurcata* 8511
- pests, new records, *Zea mays*, *Caloglyphus krameri*, *Parasitus consanguineus*, *Procladius*, India, Punjab 7735
- predation, forests, Phlebotomus, Costa Rica 7604
- predation, geographical variations, *Stator* genera, *Enterobolium cyclocarpum*, Central America 5973
- predators, destruction, *Cirsium canescens*, *Paranatha cilia*, *Orellia occidentalis*, *Homoeosoma stypticellum* 9105
- predators, life history, *Paranatha cilia*, *Orellia occidentalis*, *Homoeosoma stypticellum* 5884
- size, predation effects on, *Rumex crispus*, *Rumex obtusifolius*, *Gastrophysa viridula* 6784
- Trifolium repens*, phenology, behavior, morphology, *Apis mellifera* 1970
- viability, *Sorghum vulgare*, chemical control, pests, *Atherigona* 782
- Segmentation**, cytology, reviews, Insecta 8897
- Segments**, abdomen, compartmentation, *Drosophila melanogaster* 921
- epidermis, gap junctions, membrane permeability, *Oncopeltus fasciatus*, *Calliphora erythrocephala* 8901
- leg, neurons morphology, defective mutant, *Drosophila* 896
- membranes, ultrastructure, morphology, *Locusta migratoria migratoroides* 3271
- Segregation**, chromosomes, correlation, biological properties, *Drosophila melanogaster* 3090
- chromosomes, genetic variance, *Drosophila melanogaster* 9403
- habitat selection, parasitism, sex differences, larvae, *Thyridopteryx ephemeraeformis* 4444
- Selirus cinctus cinctus**, life history, rearing, morphology, immature stages, USA, Illinois 8292
- Selandriniae**, check lists, species composition, Europe, Carpathian Basin 8682
- Selaphorus platyceris**, diets, food organisms, Arthropoda 571
- Selection**, adaptiveness, genotypes, *Drosophila melanogaster* 1508
- apiculture, breeding, stock maintenance, methodology, *Apis mellifera* 8461
- aphismomethyl, pesticide resistance, population genetics, *Amphiscaudus fallacis*, *Tetranychus urticae* 3128
- breeding, cocoons, physical properties, *Bombyx mori* 9427
- breeding, cocoons, physical properties, *Bombyx mori* 9432
- bristles, chromosomes, *Drosophila melanogaster* 1513
- chromosomes, polymorphism, statistical analysis, *Drosophila pseudoobscura* 3871
- damage, host plants pest resistance, diets, *Oenitria rubra*, *Zea mays* 3780
- development, egg production, population genetics, *Tribolium castaneum* 1980
- fecundity, life history, *Drosophila melanogaster* 3120
- fitness, sex ratio, parasitoids, *Heterospilus prosopidis* 7538
- genes, linkage disequilibrium, *Drosophila subobscura* 1497
- genetic factors, sex ratios, *Tribolium castaneum* 1561
- genetic variance, linkage, heritability, *Drosophila melanogaster* 5441
- genetics, food preferences, biotypes, *Nilaparvata lugens* 2340
- host plants association, oviposition, *Callosobruchus maculatus* 1248
- inbreeding, effects on mating behavior, *Drosophila melanogaster* 5485
- insecticides susceptibility, DDT, males release, *Anopheles gambiae* 6135
- linkage, malate dehydrogenase enzyme polymorphism, relationship chromosomes polymorphism, *Drosophila subobscura* 9394
- mechanisms, polymorphism, ref(2)P locus, *Drosophila melanogaster* 7867
- methodology, breeding, mathematical models, statistical genetics, *Apis mellifera* 8620
- parasites, infectivity, evolution, *Hymenolepis citelli*, *Tribolium confusum* 8998
- pest resistance, *Nilaparvata lugens*, *Oryza sativa* 6199
- reproductive organs, color, age effects, mating, *Spodoptera littoralis* 2707

Selection, (continued)

- pesticide resistance, *Amblyseius fallacis* 5794
 pesticide resistance, enzymatic activity effects on, *Nephotettix cinctipes* 305
 pesticide resistance, genotypes, dieltrid, diazinon, *Lucilia cuprina* 7873
 pesticide resistance, malathion, *Drosophila melanogaster* 7868
 pesticide resistance, malathion, *Epilachna sparsa* 2963
 pesticide resistance, methyl parathion, *Heliothis virescens* 8667
 pesticide resistance, permethrin, biological control, *Amblyseius fallacis* 6288
 pesticide resistance, population genetics, dimethoate, *Musca domestica* 3124
 pesticide resistance, population genetics, *Hylemya antiqua* 8665
 pesticide resistance, pyrethroids, physiology, *Musca domestica* 1055
 pests, yield, *Zea mays*, *Diatraea saccharalis*, *Spodoptera frugiperda* 3751
 phenotypes, coloral characteristics, *Apis mellifera*, Canada, Alberta 9433
 phenotypes, morphology, *Drosophila melanogaster* 2341
 population stability, population genetics, *Drosophila melanogaster* 2864
 pressure, spermatophores nutritive value, comparison, *Heliconius chthonius*, *Dryas julia* 773
 sexual reproduction, body size, males, *Lepidoptera* 4326
 strains, bristles morphology, *Drosophila melanogaster* 1553
 survival, sterile-release, pest control, *Anthonomus grandis* 3718.

Selectivity,

- insecticides, pyrethroids, pests, natural enemies, reviews, *Insecta* 7408.

Self-assessment,

- Insecta*; immune response, role hemocytes 6604.

Seldosoma brunearia,

- geographical distribution, life history, morphology, Czechoslovakia 7104.

Seldosoma plumaria,

- geographical distribution, life history, morphology, Czechoslovakia 7104.

Semen,

- artificial insemination, *Apis mellifera*, storage, freezing, nitrogen, viability 1877
 receptacles, ultrastructure, histochemistry, *Glossina morsitans morsitans* 3455
 reproductive systems, reproductive organs, *Leucania separata* 4243
 storage, females, enzymatic activity, esterase, *Drosophila melanogaster* 2716.

Semiadalia linotata,

- digestive tract activity, measuring techniques 2545.

Semiadalia undecimnotata,

- rearing, artificial diets 6474

Semiard environmenta,

- colonies, feeding behavior, *Macrotermes michaeliensis*, Kenya 2004
 savannas, soil fertility, vegetation, *Macrotermes michaeliensis* 5988
 water balance, vapors absorption, frontal bodies role, *Arenivaga investigata* 977.

Semiadalia tricornis,

- new species, taxonomy, morphology, North America 845.

Semiadalia fluid,

- enzymes alleles, competition, sexual reproduction, *Drosophila melanogaster* 2731.
 receptacles, ultrastructure transformation, molting, *Thermobia domestica* 1076
 storage, females, enzymatic activity, esterase, *Drosophila melanogaster* 2716.

Seminiferous tubule,

- ultrastructure, *Leptoneta microphthalmia* 329.

Semudobia,

- galls, association, host plants, *Betula* 7565.

Senegal,

- geographical distribution, control programs, oochocerciasis, *Simulium* 9249
 geographical distribution, population dynamics, host-parasite interactions, *Drosophila thoracica* 7753
 new records, *Derozetellus* 4781
 new species, taxonomy, morphology, *Elatonura ploutae*, *Mesocneme dupuyi* 7999
 new species, taxonomy, morphology, *Oligonychus senegalensis* 8713.
 pests, crop fields, surveys, *Acar* 9285
 surveys, taxonomy, morphology, *Tingidae* 4012

Senegal, Pkidae,

- malaria, disease transmission, population dynamics, *Anopheles arabiensis* 9239

Sense organs,

- antennae, mutants, neurons morphology, *Drosophila* 142.
 antennae, ultrastructure, *Polytenus lagurus* 4140.
 appendages, abdomen, *Gryllus domesticus* 803.
 brush-organs, morphology, thorax, antennae, *Eiella zinckenella* 2511
 effects on mating behavior, *Blattella germanica* 2744
 electrophysiological recording, methodology, hematology, bibliographies, *Arthropoda* 4758.

- functional morphology, auditory perception, *Tettigoniidae* 3295.
 hearing, structure, *Cystoma saundersi* 139
 larvae, morphology, role, host plants orientation, chemotaxis, *Hylemya antiqua* 913.

- morphology, *Tingidae* 4965
 neurophysiology, anatomy, horizontal cells, *Phaenicia sericata* 4138
 sensilla, morphology, *Atherigona soccata* 4131
 sensilla, physiology, morphology, *Periplaneta americana* 4978
 taste perception, mouthparts, ultrastructure, *Drosophila melanogaster* 133

Sensilla,

- anatomy, morphology, reviews, *Culicidae* 8921
 chemoreceptors, innervation, *Aedes aegypti* 3290
 chemoreceptors, ovipositor, *Ethionema operculata* 6530
 chemoreceptors, ultrastructure, *Acerentomon majus* 3287
 chemoreceptors, ultrastructure, role, feeding behavior, *Macrosteles fascifrons* 4362.

- gravity receptors, orientation, *Arenivaga* 2538
 leg, mechanoreceptors, typology, morphology, *Periplaneta americana* 4980
 maxillary palps, anatomy, ultrastructure, *Toxorhynchites brevipalpis* 4137
 maxillary palps, ultrastructure, *Gryllus bimaculatus* 3294
 mechanoreceptors, spatial distribution, thorax, leg, *Schistocerca gregaria* 910
 morphology, *Atherigona soccata* 4131
 morphology, males, phylogeny, *Chironomidae* 4966
 mouthparts, innervation, ultrastructure, females, *Simulium venustum* 4142
 olfaction, blood sucking, *Diptera*, *Phthiraptera* 2532
 oviposition, antennal sensilla, legs, ovipositor, *Tinea pellionella* 3286
 sense organs, physiology, morphology, *Periplaneta americana* 4978
 sensu, ultrastructure, function, *Chironomus* 6535
 thorax, neurons, anatomy, mutants, *Drosophila* 4962
 wings, histology, *Cotona aurata*, *Geotrupes silvaticus* 7302

Sensitivity,

- associative learning, mutation, *Drosophila* 8647
 electroretinograms, light adaptations, *Romalea microptera* 148
 gravity, neurons, orientation, *Gryllus* 895
 growth regulators, precocene II, development, ovary, *Pyrrhocoris opertus* 8225

Sensitivity, (continued)

- host plants leaves, feeding behavior, *Eriophyes cladophyllus*, *Solanum dulcamara* 1236.
 infection, muce, Venezuelan equine encephalitis virus, *Aedes aegypti* 7626.
 insecticides, bitonate, trichlorfon, photoperiod, *Musca domestica* 7419.
 juvenile hormones, prothorax glands, *Mamestra brassicae* 3391
 light, ultraviolet radiation, compound eyes, light traps, *Spodoptera exigua*,
Spodoptera frugiperda 911
 mutagenesis, diepox butane, *Drosophila melanogaster* 7040
 mutagens, *Drosophila* 7039
 pesticides (organophosphorus), abate, fenitrothion, malathion, larvae, *Culex pipiens*, *Culex borealis*, *Theobaldia longicauda* 8192
 photoperiod, fat body development, diapause, *Hemaphysalis viginotopunctata* 7456.
 photoreceptors, diurnal variations, *Acrididae* 147.
 prothorax glands, juvenile hormones, developmental stages, *Mamestra brassicae* 3387
 venom, man, *Hymenoptera* 3677.
 venous, man, immunotherapy, case reports, *Insecta* 3686.
 venoma, toxicity, man, reviews, *Apidae* 6616.
 wavelength, electroretinograms, compound eyes, bioluminescence, *Photuris versicolor* 2540
 X radiation, genes, lethality, mutation, *Drosophila melanogaster* 7044

Sensors,

- central nervous system, growth, ectopic neurons, reviews, *Insecta* 3471
 epithelia neurons, electric currents, *Acheta* 2528
 nodules, morphology, abdomen, variation, taxonomy, *Tingidae* 8885

Sensory stimuli,

- flight activity, *Hypera postica* 8061
 host plants, host preferences, host selection, herbivores, *Insecta* 8070
 transduction, mechanoreceptors, *Periplaneta americana* 2536.
 wind, perception, neurons, *Periplaneta americana* 7291.

Separation techniques,

- eggs, mass rearing, *Spodoptera frugiperda* 2491
 fat body, uterus glands, *Glossina morsitans* 61
 methodology, developmental stages, *Culicidae* 69

Sepsid fuscipennis,

- eggs suitability, age effects on, parasitoids, *Trichogramma* 8320.

Sepsidophilus constans,

- new records, geographical distribution, Switzerland 7099

Sepsidophilus doderi,

- habitat, leaf litter, Switzerland 7621

Sepsipateria,

- biosynthesis, intermediates purification, *Drosophila* 8951.
 synthesis intermediates, purification, characterization, *Drosophila* 8947.

Sepsis,

- case reports, infans, infestation, *Drosophila* 4500.
 taxonomy, morphology, Italy 3998

Sepsis violacea,

- cattle pests, abundance, British Isles, Scotland 736.

Septate junctions,

- embryos ultrastructure, *Manduca sexta* 3462

Septic tanks,

- breeding sites, surveys, *Aedes*, *Culex*, *Armigeres*, *Uranotaenia*, Malaysia 9261

Sergentomyia dentata,

- gynandromorphism, occurrence, Greece 8882

Sergentomyia minuta,

- gynandromorphism, occurrence, Greece 8882

Sergentomyia suai,

- new records, geographical distribution, China, People's Rep., Szechuan Province 2422

Sergentomyia turfanensis,

- new species, morphology, taxonomy, China, People's Rep., Szechuan Province 2422.

Serianus argentineae,

- taxonomy 5553.

Serianus minutus,

- taxonomy 5553

Sericopelma,

- new species, taxonomy, morphology, Costa Rica 6352.

Sericostoma maciachianum,

- coloration 4086

Sericothrips variabilis,

- anti-predatory behavior, predatory behavior, *Orius insidiosus* 3613.
 pests, biological control, predation, developmental stages, *Orius insidiosus* 2138

Seriological tests,

- barley yellow dwarf virus detection, *Aphididae* 6611.
 electrophoresis, predators identification, *Eldana saccharina* 2110

Serotonin,

- induced secretion, salivary gland, *Phormia regina* 1798.

Serratoxin,

- antagonism, saliva, *Rhodnius prolixus* 3385

Serothys,

- pathogenicity, susceptibility, *Bacillus thuringiensis*, *Galleria mellonella* 5733.

Serothysing,

- pathogens, *Rickettsia*, *Dermacentor andersoni*, USA, Montana 1006

Serratrumba aerrula,

- predation, feeding behavior 1211

- predatory behavior, attack, capture 6741.

- predatory behavior, food organisms, *Folsomia candida* 7533.

- predatory behavior, predator-prey interactions, *Folsomia candida* 1199.

Serritermes serifer,

- bionomics, geographical distribution, colonies 6989

Serromyia,

- keys 7964

Serromyia esakii,

- new records, Philippines 7964

Serromyia heveli,

- new species, taxonomy, Sri Lanka 7964

Serromyia maculipennis,

- new species, taxonomy, Sri Lanka 7964

Serromyia pendleburyi,

- new records, Vietnam 7964

Serromyia punctata,

- new species, taxonomy, Sri Lanka 7964

- Serum proteins,**
larvae, Diptera 2564.
- Sesamex,**
insecticides, ganglia, electrophysiological recording, toxicity, *Blaberus discoides* 5778.
- Sesamia calandrella,**
crop field damage, agricultural practices, *Zea mays* 3748.
- Sesamia cetrica,**
larvae hosts, effects on parasites development, *Bracon brevicornis* 509.
pests, infestation, varieties susceptibility, *Saccharum officinale* 6952
- Sesamia inferens,**
pests, abundance, agricultural practices effects on, *Saccharum officinale* 6951.
host plants, pest resistance, genotypes, *Eileusina coracana* 5408.
sexual dimorphism, body size, pupae, adults 863
- Sesilidae,**
pests, abundance, seasonal variations, USA, Mississippi 3786.
- Sesioles,**
taxonomic revision, North America 2453.
- Sesioles californicus,**
new species, morphology, taxonomy, North America 2453.
- Sesioles depressus,**
morphology, taxonomy, North America 2453
- Sesizmae,**
effects on diflufenzuron metabolism, *Musca domestica* 5773.
- Setae,**
morphology, *Aedes albopictus* 5855
morphology, taxonomy, larvae, pupae, *Ceratomya spicata* 1678
wings, coupling, Encyrtidae, Aphelinidae 1726
- Setaria labiastopapillosa,**
microfilariæ, unoculation methodology, *Aedes aegypti* 7259
- Setensis,**
new species, morphology, Formosa 1610.
- Setensis aithal,**
new species, morphology, Formosa 1610.
- Setensis nitidula,**
new species, morphology, Formosa 1610.
- Setensis similis,**
new species, morphology, Formosa 1610
- Setensis subvulpes,**
new species, morphology, Formosa 1610
- Setodes arenatus,**
new species, taxonomy, morphology, USA, Southeast 5612.
- Setodes dixiensis,**
new species, taxonomy, morphology, USA, Southeast 5612.
- Settling behavior,**
Aphididae population density effects on, *Coccinella septempunctata* 2865.
flight activity, disease transmission, *Rhopalosiphum padi* 3562.
locomotor activity, host plants, *Aphis citricola*, *ovatus malisuctus* 1243.
- Sewage effluents,**
effects on species composition, abundance, *Plecoptera*, Canada, Alberta, Bow R. 8609.
- Sex,**
isolation, hybridization, sterility, population genetics, *Drosophila melanogaster* 6281.
tactile discrimination, interspecific relationships, *Notonecta alauca* 414.
visual discrimination, sexual dimorphism, *Peris proctodea* 7496.
- Sex chromosomes,**
aneuploidy, sex ratio diversity, *Drosophila melanogaster* 3119.
breakage, spermatzoa, storage females, triethylenemelamine, ethylmethanesulfonate effects on, *Drosophila melanogaster* 1515.
exchange, rRNA genes, males, *Drosophila melanogaster* 3895
genetic variance, cross-breeding, strains, *Drosophila melanogaster* 7029.
karyotypes, morphology, *Dermacentor andersoni* 1547.
karyotypes, *Lycosa maitiosa*, *Lycosa thorilli* 1514.
karyotypes, males, *Berdenella*, *Satchelliella* opaca, *Tonnioella pulchra* 2329
karyotypes, meiosis, *Antheraea compta*, *Antheraea assamensis* 3897.
karyotypes, meiosis, *Nilaparvata lugens* 7845.
lesions, DNA repair, deficient mutant, *Drosophila* 5474.
linkage, enzymes loci, characterization, *Incisitermes schwarzi* 2300.
mutants, lethality, *Drosophila melanogaster* 5473.
mutation, 7,12-dimethylbenz(a)anthracene, *Drosophila melanogaster* 2332.
population genetics, *Pycnogaster cucullata*, Iberian Peninsula 7055.
species comparison, *Pellenes* 7033.
structure, salivary gland, *Anopheles sinensis* 9410.
translocations, population genetics, *Kalteromes approximatus* 3892.
- Sex determination,**
adults, morphology, *Phloeotribus limmaris* 2508.
chromosomes, *Gerris*, *Limnoporus* 8637.
chromosomes, localization, *Chironomus tepperi* 3888.
diploids, drones, chromosomes, *Apis cerana japonica* 1546.
gene expression, biosynthesis, *Chrysomya rufifacies* 758.
gynandromorphs, temperature-sensitive mutant, loci, gene expression, *Drosophila melanogaster* 7824.
Heteropoda pygmaea 8622.
identification, morphology, *Cylindrocryptus adspersus* 1706.
interference, mutation, germ cells, *Drosophila* 3906.
intersexes, genetics, *Lymantia dispar*, Japan 3918.
karyotypes, chromosome number, 6 species, *Cambridge* 4682.
males, genes, lethality, *Megoura viciae* 6252.
methodology, automation, recombination, genetic factors, *Ceratitis capitata* 8009
morphology, pupae, *Hypsipyla robusta* 78.
mutants, vitellogenesis, gonads, morphology, *Drosophila melanogaster* 6268.
parasitoids, *Pimplinae* 7471.
parthenogenesis, egg production, hormones effects on, *Solenopsis invicta* 1888.
parthenogenesis, hormones effects on, *Solenopsis invicta* 1888.
population genetics, apiculture, breeding, *Apis mellifera* 8659.
population genetics, *Pycnogaster cucullata*, Iberian Peninsula 7055.
role, reproductive organs, anatomy, *Diadromus pelliculus* 3504.
species identification, methodology, *Coleoptera* 1696.
- Sex differences,**
antennal sensilla, ultrastructure, *Anoplius tenebrosus* 8071.
body size, parasitoids, *Trichogramma minutum* 8323.
chemosensillants effects on fertility, *Callosobruchus chinensis* 1066.
comparison, development time, *Heliothis zea*, *Heliothis virescens* 1089.
- Sex differences, (continued)**
cuticles chemical composition, *Musca domestica* 108.
diapause, adults, *Danaus plexippus* 350.
digestive tract, enzymatic activity, amylase, *Gryllotalpa africana* 2547.
dispersal, population density, *Musca vetustissima*, Australia 1311.
DNA, nucleotide sequence, restriction endonucleases, *Drosophila* 3076.
electroantennograms, sex pheromone mimics, *Periplaneta americana* 970.
enzymatic activity, γ -glutamyltransferase, pesticide resistance, *Musca domestica* 947.
flight activity, *Triatoma infestans* 3275.
food attractants attractancy, comparative studies, *Hyemlya* 485.
hatching sequence, *Lymantia dispar* 5807.
heavy metals bioaccumulation, rivers, *Dytiscidae*, USSR 5436.
hemolymph, sodium, potassium, *Schistocerca gregaria* 6571.
identification, morphology, *Ipsi tyrogaphus* 7274.
identification, morphology, *Rhyzopertha dominica* 870.
morphology, *Willowsia jacobsoni*, Puerto Rico 1619.
nondysjunction chromosomes, inbreeding, *Drosophila melanogaster* 4679.
parasites infection, *Trypanosoma*, *Glossina pallidipes*, Kenya 1318.
parasites infestation, *Ixodidae*, *Acari*, *Trichosurus caninus*, Australia, New South Wales 6776.
polymorphism, pigmentation, larvae, *Choristoneura fumiferana* 5643.
reproductive effort, energetics, *Cystosoma saundersii* 9063.
seasonal variations, parasitism, *Amblyomma americanum* 3586.
segregation, habitat selection, parasitism, larvae, *Thrydopteryx ephemeraciformis* 4444.
sexual dimorphism, *Latreutes*, Australia, Queensland, North 2140.
sodium requirements, mud feeding, *Pteris rapae*, USA, Pennsylvania 4346.
survival, irradiation, strontium 90, *Glossina palpalis* 1470.
- Sex differentiation,**
genitalia morphology, *Hyperodes bonariensis* 87.
morphology, *Phymatocera dahlbom* 2507.
size, blood meals, *Cimex hemipterus*, measuring techniques 1702.
- Sex hormones source,**
neuroendocrine system cells, *Rhodnius prolixus* 964.
- Sex linkage,**
X chromosome, recombination, variability, genetic variance, *Drosophila melanogaster* 5461.
chromosomes, recessive, mutants, bald antenna, *Anopheles albimanus* 5458.
inheritance, reproductive behavior, oviposition, *Callosobruchus maculatus* 5483.
inversions, chromosomes, *Simulidae* 5457.
mutants, gene mapping, *Culex pipiens* 7046.
mutants, recessive, maroon-eye, *Aedes albopictus* 6270.
mutation, x radiation, *Drosophila melanogaster* 6267.
- Sex pheromone,**
chemical composition, effects on reproductive behavior, *Cochliomyia hominivorax* 221.
components, effects on flight activity, *Trichoplusia* ni 419.
effects on, reproductive behavior, *Sitotroga cerealella* 424.
habitation, response mating behavior, *Pectinophora gossypiella* 426.
pheromone traps, *Ostrinia nubilalis* 596.
- Sex pheromone,**
acetates, efficacy, pest control, *Euxoa ochrogaster* 742.
analogs, olfactory stimuli, electroantennograms, *Anthonomus grandis* 5006.
analogs, synthesis, *Pseudococcus comstocki* 4165.
application, pest control, meteorology, *Pectinophora gossypiella* 4596.
assays, methodology, *Trichoplusia ni* 4913.
attractancy, chemical communication, *Zygaena* 5116.
attractancy, crowding, males, *Acanthoscelides obtectus* 5091.
attractancy, disruption, synthetic components, *Choristoneura fumiferana* 2756.
attractancy, *Glossina morsitans morsitans*, *Glossina pallidipes* 6084.
attractancy, habituation, *Trichoplusia ni* 2763.
attractancy, interspecific relationships, *Pyralis farinalis*, *Amyelois transitella* 9839.
attractancy, interspecific relationships, *Pyralis farinalis*, *Amyelois transitella* 9076.
attractancy, males, *Lepidoptera* 2592.
attractancy, olfactory communication, *Heliothis punctigera* 5871.
attractancy, periplanone-B, pheromone traps, *Periplaneta americana* 5007.
attractancy, pest control, *Phthorimaea operculella* 6140.
attractancy, pest control, *Sitophilus oryzae* 7333.
attractants, biological control, efficacy, *Musca domestica* 743.
attractants, efficacy, comparison, *Synanthedon exitiosa*, *Synanthedon pictipes* 2231.
attractants, pest control, *Platyptilia carduidactyla* 2187.
attractants, pest control, suppression, mating, *Eucosmi somomana* 4585.
attractants, pheromone traps, catches, variations, *Scotogramma trifolii*, Canada, Manitoba 4337.
attractants, *Sperchia intractana* 1933.
attractants, trapping, pests, *Homona magnanima*, Japan 5336.
attractants, trapping, *Popillia japonica* 4632.
attraction, orientation, males, *Periplaneta americana* 4302.
bait, traps, *Drosophila disculosa*, USA, South Carolina 425.
bait, trapping, *Carpocapsa niponensis*, *Grapholitha molesta*, *Synanthedon hector*, *Archippus brevipennis*, Japan 5334.
biochemical analysis, chemical composition, females, *Cydia pomonella* 2600.
biochemical analysis, *Lortia viridana* 3347.
biochemical analysis, males, hairpencils, *Grapholitha molesta* 3349.
biochemical analysis, *Pandemis cerasana* 4166.
biochemical analysis, pheromone traps, *Bussola fusca* 3354.
biochemical analysis, *Plutella xylostella* 3346.
biochemical characteristics, attractancy, *Xylomyges curialis* 5703.
biochemical composition, *Maestras brassicae*, *Pseudaletia unipuncta* 971.
biological control methodology, air permeation technique, *Spodoptera frugiperda*, *Heliothis zea* 9346.
biosynthesis, integument, abdomen, *Musca domestica* 8095.
biosynthesis, mating effects on, host plants aggregation, *Ips paraconfusus* 3359.
biosynthesis, pheromone emission, males response, *Brachymeria lasus* 2754.
burrows, mating behavior, *Sphodros abotii*, *Sphodros rufipes* 6714.
chemical communication, (Z)-9-alkenols effects on inhibition, *Spodoptera litura* 1163.
chemical communication disruption, pest control, *Anthonomus grandis* 5293.
chemical communication, mating behavior, *Tiphidae* 6665.
chemical communication, pests, *Lycoglossus communis* 8098.
chemical composition, (E)-10-hexadecenal, attractancy, males, *Dichrocrocis*

Sex pheromone, (continued)

- punctiferalis 7341.
chemical composition, (Z)-11-hexadecenal, (Z)-9-tetradecenal, *Heliothis virescens* 6578.
chemical composition, attractancy, components, *Spodoptera littoralis* 6575.
chemical composition, attractancy, *Cryptophlebia leucotera* 2599.
chemical composition, attractancy, *Platyptilia carduactyla* 1788.
chemical composition, attractancy, *Quadraspodius perniciosus* 1783.
chemical composition, attractants, males, *Euxoa auxiliaris* 698.
chemical composition, components attractancy, *Heliothis subflexa* 2585.
chemical composition effects on persistence, *Insecta* 216.
chemical composition, *Eutegmema acrea* 1782.
chemical composition, females, *Pseudaletia unipuncta* 219.
chemical composition, *Leucania loreyi* 1773.
chemical composition, *Malacosoma disstria* 223.
chemical composition, *Manestra pisi* 228.
chemical composition, *Manestra suasa* 6577.
chemical composition, *Ostrinia furnacalis* 178.
chemical composition, *Ostrinia furnacalis* 1781.
chemical composition, *Panolis flammea* 8973.
chemical composition, pest control, *Rhyacionia frustrana* 214.
chemical composition, *Plusia chalcites* 2598.
chemical composition, variability, population studies, *Argyrotaenia velutinana* 1772.
chemosterilization, pest control, *Glossina morsitans* 5268.
chemotaxis, flight, visual stimuli, *Grapholitha molesta*, *Heliothis virescens* 5843.
components, attractancy, *Heliothis* *z* 3540.
components, effects on males flight activity, *Trichoplusia ni* 1927.
components, effects on males flight, *Spodoptera litura* 1160.
components, mating behavior disruption, biological control, *Heliothis virescens* 3763.
control, pests, *Pectinophora gossypiella*, USA, Arizona 1463.
courtship, role, biochemical analysis, diets, *Utetheisa ornatrix* 4304.
courtship, swarming, *Diplazon pectoratorius* 5110.
cuticle hydrocarbons, bioassays, *Musca autumnalis* 1780.
defense secretions, composition, mating behavior, *Taeniopoda eque* 5010.
(Z)-9,11-dodecadien-1-yl acetate synthesis, *Diparopsis castanea* 1777.
effects on insecticide efficiency, *Musca domestica* 697.
effects on mating behavior, *Bradyia impatiens* 416.
effects on mating behavior, males, *Glossina palpalis* 213.
effects on mating, *Heliothis* *z* 5298.
effects on sexual behavior, calling behavior, *Anticarsia gemmatilis* 1924.
factors affecting release, role, mating behavior, *Rhagoletis ceras* 8960.
flight activity, correction, *Plodia interpunctella* 1122.
flight activity, males, *Choristoneura fumiferana* 2736.
glands, morphology, histology, *Lymantria dispar* 5013.
groups effects on attractancy, males, *Acanthoscelides obtectus* 3544.
inhibitors, pest control, methodology, females, *Diparopsis castanea* 1465.
integument exocrine glands, sexual dimorphism, *Pentatomoides* 985.
isolation, bioassays, *Dacus oleae* 5005.
isolation, characterization, *Glossina pallidipes* 3355.
isomers, attractancy, *Neodiprion lecontei* 3538.
males orienting response, chemotaxis, *Periplaneta americana* 2760.
mating behavior, activity patterns, *Apanteles glomeratus* 2740.
mating behavior disruption, pest control, *Anthrenus grandis* 9325.
mating behavior disruption, pest control, *Dermapteron variabilis* 1907.
mating behavior, flight activity, *Hyphantria ceca* 3528.
mimics, attractancy, (+)-trans-verbenyl acetate, *Periplaneta americana* 4311.
mimics, effects on activity, *Periplaneta americana* 1923.
mimics, electroantennograms, sex differences, *Periplaneta americana* 970.
mimics, (Z)-9-tricosene, biosynthesis, *Musca domestica* 229.
mutants, courtship inhibition, *Drosophila melanogaster* 972.
olfactory perception, electroantennograms, *Spodoptera littoralis* 1738.
orientation, sexual behavior, females, *Plodia interpunctella* 5840.
pest control, females tethering, methodology, *Choristoneura fumiferana* 5291.
pest control, persistence, dose, *Cydia nigricana* 696.
pest control, suppression, mating, oviposition, air permeation technique, *Spodoptera frugiperda*, *Heliothis* *z* 4624.
pheromone emission.
pheromone emission, neurophysiology, *Lymantria dispar* 5699.
pheromone traps, attractancy, *Homoeosoma electellum* 5702.
pheromone traps, capture-recapture studies, simulation models, *Plutella* *lystella* 218.
pheromone traps, catching methods, *Agrotis ipsilon* 2244.
pheromone traps, chemicals, *Croceia semipurpurana* 2095.
pheromone traps, control programs, *Earias insulana* 2078.
pheromone traps, efficacy, *Synanthedon pictus* 2230.
pheromone traps, mating behavior disruption, pest control, *Amyelois transitella* 4507.
pheromone traps, methodology, *Grapholitha molesta* 57.
pheromone traps, methodology, *Prays citri*, Israel 862.
pheromone traps, monitoring, populations, *Conopia myopaeformis*, Italy 2889.
pheromone traps, seasonal variations, *Agrotis segetum*, Japan 2227.
purification, chemical composition, females, *Plutella lysolella* 8964.
queens, extracts, attractancy, workers, *Apis mellifera ligustica* 8772.
receptors, ultrastructure, *Musca domestica*, *Glossina morsitans* 974.
reproductive isolation, mate selection, feeding types, *Dichocrois punctiferalis*, Japan 1912.
role, mating behavior, *Colletes cunicularius* 5101.
scent marking behavior, trail following behavior, *Pseudococcus calceolariae* 1932.
sexual behavior, crowding effects on, *Acanthoscelides* 4306.
sexual behavior, *Glossina pallidipes* 8254.
source density, mating behavior disturbance, *Synanthedon eximosa* 699.
species composition, identification, *Ostrinia furnacalis*, *Ostrinia subulalis*.
China, People's Rep., Henan Province 3750.
storage, glands, lipids, *Dermapteron variabilis*, *Dermapteron andersoni* 5008.
synthesis, *Aphomia gularis* 2595.
synthesis, *Carpocapsa niponensis* 2596.
synthesis, chemical composition, pest control, conferences, *Insecta* 9503.
synthesis, *Lepidoptera* 3729.
synthetic, attractancy, *Noctuidae* 7335.
synthetic, attractancy, *Synanthedon pictus* 7338.
synthetic attractants, efficacy, *Spodoptera eximia*, *Homoeosoma electellum* 2201.
synthetic attractants, isomers attractancy, *Agrotis segetum* 3356.
synthetic attractants, traps, response, *Popillia japonica* 1930.

Sex pheromone, (continued)

- synthetic, communication disruption, *Grapholitha molesta* 415.
synthetic, mating behavior deterrents, ciste lipids, *Glossina morsitans* 8260.
synthetic, mating behavior disruption, pest control, *Eucosma sonomana* 8584.
synthetic, pheromone traps, pest control, *Homona magnanima* 3026.
synthetic, sensilla trichodea, electroantennograms, *Spodoptera exempta* 7344.
Trichoplusia ni, pheromone traps, *Scirtes orbicellus* 1787.
volatiles, chemical composition, *Dacus oleae* 8096.
Sex ratio,
abundance, Auchenorrhyncha, Egypt 6950.
abundance, seasonal variations, parasites, *Agromyza frostella*, grasses, USA.
Pennsylvania, leaf blotch 605.
biology, *Microdon fuscipennis* 2778.
broods, colonies, *Evyalus calceatus* 5422.
colonial characteristics, *Polistes exclamans* 3045.
colonial characteristics, populations, *Apterostigma dentigerum* 3846.
colonial characteristics, queens effects on, *Hymenoptera* 3043.
colonial characteristics, queens effects on, *Myrmica* 2279.
colonies, temperature effects on, *Evyalus calceatus* 5078.
Cereidae, 11 species, Costa Rica, Guanacaste Province 2801.
correlation, segregation chromosomes, *Drosophila melanogaster* 3090.
development, life history, *Euprocetus lunata* 4323.
disruptive effects on, breeding success, population dynamics, *Sarcophaga* 3605.
diversity, aneuploidy, sex chromosomes, *Drosophila melanogaster* 3119.
effects on culture egg production, *Anopheles albimanus* 387.
evolution, population genetics, *Hymenoptera* 7058.
fecundity, temperature effects, *Chrysomphalus ficus* 1883.
foraging behavior optimization, *Vespa* 6819.
genetic variance, *Drosophila pseudoobscura* 6290.
growth regulators effects on, *Altoid*, *dimulin*, *Culex pipiens* 1042.
habitat, nests, *Anastrepha* *antipoda*, *Eudomyia* *formicaria*, *Megachile* *relativa*, *Megachile mendica*, *Megachile inermis* 1279.
hosts, parasitism, *Heleidomus vivipara*, *Cucoides varipennis* 6024.
infection, pathogens, *Nosema* white, *Tribolium castaneum* 6036.
kin selection, social organization, *Hymenoptera* 3048.
natural enemies, predation, *Insecta* 8386.
parasitoids, life cycle, *Dibrachys boarrii*, *Galleria mellonella* 9131.
parasitoids, siblings, mating, *Scelionidae* 3609.
polymorphism, population structure, population genetics, *Acraea encedon* 7056.
population genetics, *Drosophila pseudoobscura*, USA, California 6279.
population genetics, models, colonies, polymorphism, *Formica* 3923.
population genetics, annual variations, *Ostrinia lignaria*, USA, Utah 6871.
population structure, *Belgica antarctica*, Antarctica 6016.
population structure, Carabidae, New Zealand, Banks Peninsula 6868.
population structure, colonies, *Reticulitermes flavipes* 585.
population structure, *Cydia ptycho* 8381.
reproductive mortality, workers production, *Apterostigma dentigerum* 3047.
reproductive status, *Earias insulana*, Israel 9175.
reproductive strategy, hosts body size effects on, *Heteropisus prusopis* 7538.
seasonal variations, population dynamics, hatching, *Aedes triseriatus*, USA.
Indiana 1266.
sexual reproduction, oviposition, egg production, fecundity, *Lagna villosa* 6630.
sexual reproduction, single sex progeny, *Antennaria scorghicola* 1915.
surveys, *Scymnus* *lividigaster*, *Lepidoptera* *galbula*, Australia 2863.
swarm, flight activity, *Encoelphalidae* 667.
temperature, effects of, physical activity, life span, *Musca domestica* 429.
viability, a chromosome, population genetics, *Drosophila melanogaster* 5499.
Sex ratios,
genetic factors, selection, *Tribolium castaneum* 1561.
population genetics, *Phylloxera vitifoliae*, Japan 2347.
Sexual behavior,
translocations, *Incisitermes schwarzi* 3077.
Sexual behavior,
comparative studies, diets, effects on, *Menochilus sexmaculata* 1117.
copulation, flight activity, *Eudocia tibialis*, USA, Maryland 2733.
courtship, mutants, *Drosophila* 4286.
date variations, *Amyelois transitella* 5838.
environmental effects, *Agapetes galathea* 7605.
females, orientation, sex pheromone, *Plodia interpunctella* 5840.
geographical variations, population studies, *Drosophila silvestris*, Hawaii 9067.
integument exocrine glands secretion, *Pentatomoides* 985.
interspecific relationships, *Megachile* 409.
life history, *Copris lunaris* 3533.
males, carbon dioxide effects on, *Musca domestica* 430.
mathematical models, populations, *Chauliognathus pennsylvanicus* 1148.
mating behavior, *Dacus oleae* 5844.
mating effects on females locomotion, *Telegraphium commodus* 4284.
mating, *Pseudomethocha prognqua*, USA, Montana 4295.
olfaction, bioassays, sexual maturity, *Pseudohylesius nebulosus* 2739.
oviposition, date variations, photoperiods, circadian rhythms, *Culex quinquefasciatus* 1153.
oviposition, edge effect, *Anthrenus cardamines* 4290.
oviposition, *Phthia picta*, Brazil, Sao Paulo 5105.
parasites, infestation, *Macrocheles muscadomesticae*, *Dermatobia hominis* 5086.
pheromones response, bioassays, males, *Dioryctria amatella* 400.
sex pheromone attractancy, crowding effects on, *Acanthoscelides* 4306.
sex pheromone effects on, *Anticarsia gemmatilis* 1924.
sex pheromone, *Glossina pallidipes* 8254.
social organization, *Leptothorax provancheri* 2285.
tactile discrimination, interspecific relationships, *Notonecta alba* 414.
Sexual dimorphism,
aggregation behavior, *Tribolium castaneum* 220.
body size, pupae, adults, *Sesamia inferens* 863.
coloration, new species, *Autorectes louisiana*, USA, Louisiana 7228.
developmental stages, *Reticulitermes flavipes* 5634.
dispersal, movements, spatial distribution, *Tetraopes tetraophthalmus*, *Tetraopes* *femuratus* 6816.
fat body, ultrastructure, *Isoptera* 4161.
hydrocarbons, molting, *Drosophila melanogaster* 943.
integument exocrine glands, sex pheromone, *Pentatomoides* 985.
morphology, larvae, *Pseudomethocha prognqua* 467.
new records, *Willowia jacobsoni*, Puerto Rico 1619.
sex differences, *Latreutes*, Australia, Queensland, North 2140.
visual discrimination, sex, *Pieris protodice* 7496.

- Sexual maturity,**
mating behavior, age, *Anopheles stephensi* 9073.
olfaction, bioacoustics, sexual behavior, *Pseudohyleinus nebulosus* 2739
ovary, biosynthesis, juvenile hormones, *Locusta migratoria* 4278
- Sexual receptivity,**
mating, oviposition, feeding, *Amblyomma americanum* 9068
- Sexual reproduction,**
adaptations, environment conditions, geographical variations, *Scotia segetum* 1861.
adults, biology, *Microdon fuscipennis* 2778.
biometrics, mating, oviposition, *Holotrichia consanguinea* 7520.
breeding success, fecundity, eggs hatchability, *Adoxophyes* 1851
cattle redwater fever vectors, infection, *Babesia bigemina*, *Boophilus decoloratus* 4205
competition, parasites, *Aponomma hydrosauri*, *Amblyomma albolimbatum*, *Amblyomma limbatum* 5939
competition, seminal fluid, enzymes alleles, *Drosophila melanogaster* 2731.
competition, sterile-release, males, *Anthonomus grandis* 8541.
cycles, biometrics, *Anopheles darlingi*, Brazil 7527
diapause, phenology, morphology, seasonal variations, *Listronotus bonariensis*, New Zealand, Canterbury 1104
environmental effects, substrate specificity, *Rhagoletis pomonella* 2684.
fecundity, environmental factors, *Neodiprion sertifer* 7466
females, mutagens effects on, *Pimpla instigator* 3094
fertility, diapause, males, *Anthonomus grandis grandis* 2677
flight activity, mating, oviposition, *Nectopseus albida*, USA, Indiana 3862.
20-hydroxyecdysone effects on, *Acheta domestica*, *Drosophila melanogaster* 3820
inhibition, pest control, insecticides, penfluron, diflubenzuron, *Poecilocuscus pictus* 4619
interspecific relationships, *Amblyomma hebraeum*, *Amblyomma variegatum* 5486.
interspecific relationships, host plants, life history, *Endothenia daeckana*, *Sarcococa purpurea*, Canada, Quebec 4328
life history, *Chrysops hirsuticallus*, USA, California, Mendocino Co. 5146
life history, *Ecdyonurus*, British Isles, England, Lune R. 3851
life history, *Empoasca dolichi*, Nigeria 2772
life history, *Gastrophysa polygoni*, British Isles, England 4334.
life history, limiting factors, food availability, *Tenodora arduifolia sinensis* 2906
life span, physiology costs, *Drosophila melanogaster* 5056.
mass rearing, *Dacus cucurbitae*, Japan 1850
mating behavior, *Apanteles glomeratus* 2740.
nesting behavior, *Eumenes aliaudi*, Seychelles, Cousin I. 5903
Ollianus balli, Jamaica 5892.
oviposition, egg production, fecundity, sex ratio, *Lagria villosa* 6630
oviposition, life cycle, generations, *Chironomus yoshimatsui*, Japan, Zempukuji R. 3556
ovoviviparity, *Symplexe bimaculata* 5835
parasites, *Tnchogramma brevipapillum* 7422
parasites, vectors, *Trypanosoma brucei*, *Glossina morsitans morsitans* 2631
pest attack, gallery construction, oviposition, emergence, *Dendroctonus frontalis* 6680
pests, pest resistance, *Solanum*, *Myzus persicae* 4633.
pollution effects, sulfur dioxide, *Bracon hebetor* 7441.
population structure, seasonal variations, *Reticulitermes flavipes*, USA, Mississippi 2137.
population studies, *Coptopteryx viridis*, *Coptopteryx argentina*, *Coptopteryx gayi*, Argentina, Buenos Aires 5237.
predation, evolution, natural selection, males, *Insecta* 4698
predators, predator-prey interactions, *Coccinellidae*, *Acyrtosiphon pisum* 2871.
protandry, *Apis mellifera*, USA, California 323.
radiation, progeny, *Pectinophora gossypiella* 2688.
rearing, *Onchocerca volvulus* vectors, *Simulium damnosum* 5058.
seasonal variations, mating behavior, *Brachytrypes megacephalus*, Sicily 4324.
selection, body size, males, *Lepidoptera* 4326.
sex ratio, single sex progeny, *Phaenicia serripalpa* 1915.
sexual behavior, nesting behavior, *Copris lunaris* 3533.
social hierarchy, pleometric foundations, haplometric foundations, *Polistes gallicus* 5423.
spermatophores nutritive value, selection pressure, comparison, *Heliconius charitonius*, *Dryas julia* 773.
survival, host plants, *Rhopalosiphum padi*, *Prunus padus* 2838.
temperature effects on, predators, *Cybocephalus micans*, *Cybocephalus nigriceps nigriceps* 7505.
temperature requirements, *Listronotus oregonensis* 3492.
Trypangulum nitidum schultzei, *Trypangulum lactitarse*, *Trypangulum saussurei*, Costa Rica 6980
- Sexual selection,**
mate selection, aggressive behavior, body size, *Brennus anchorage* 6658.
mating behavior, *Phidippus johnsoni* 404.
- Seychelles,**
new records, *Pseudococcus microdonodon* 1580.
- Shade,**
effects on abundance, community composition, *Insecta*, New Zealand, Waitakere R. 6229
effects on nests ecological distribution, *Catantopus guineensis*, Ghana 578.
environmental effects, breeding sites, effects on pollination, *Theobroma cacao*, *Forcipomyia* 4267.
- Shamala,**
taxonomy, new species, morphology, India 34.
- Shape,**
visual stimuli, traps, efficacy, pest control, *Liriomyza sativae*, *Liriomyza trifolii* 2195.
- Sharilophora,**
taxonomic revision, identification keys, synonymy, Czechoslovakia 4875
taxonomic revision, synonymy, geographical distribution, keys 1653.
- Sharilophora ambigua,**
geographical distribution, morphology 1653.
- Sharilophora amphibola,**
geographical distribution, morphology 1653.
- Sharilophora parva,**
geographical distribution, morphology 1653.
- Sheep,**
disease transmission, vectors, Karai virus, *Rhipicephalus evertsi* 4512.
new records, parasites, vectors, *Babesia motasi*, *Haemaphysalis punctata*, British Isles 4538.
pasture defoliation, effects on population levels, *Costelytra zelandica* 545.
- Sheep, (continued)**
pathogens, oviposition, *Lucilia cuprina* 1333.
scab, disease control, diazinon, *Psoroptes communis* 646.
susceptibility, ectoparasites transmission, *Psoroptes ovis*, *Ovis canadensis* 651.
- Shelfordia,**
taxonomy, morphology, types 7215.
- Shells,**
eggs, minerals, *Phasmoda* 6633.
- Sheltering behavior,**
comb construction, *Hymenoptera* 1477.
- Ships,**
pests, population levels, estimation, *Blattella germanica* 2162.
stored products, pest control, phosphine fumigation, *Insecta* 2241.
Shirahoshizo lasiodon,
copulation, seasonal variations, bait attractancy, Japan 2901.
Shirahoshizo pini,
copulation, seasonal variations, bait attractancy, Japan 2901.
Shirahoshizo rufescens,
copulation, seasonal variations, bait attractancy, Japan 2901.
Shitocera americana,
taxonomy, morphology 2470.
Shivaphis celli,
polymorphism, morphology, India 6513.
- Shores,**
ecological distribution, species diversity, *Ephydriidae* 622.
- Shungwayana trifasciata,**
taxonomic revision, morphology, phylogeny, Africa 7168.
- Sibinia karakumica,**
new species, taxonomy, morphology, USSR, UGSSR 4795.
- Siblings,**
mating, sex ratio, parasitoids, *Scelionidae* 3609.
- Sicily,**
seasonal variations, sexual reproduction, physical activity, mating behavior, feeding behavior, *Brachytrypes megacephalus* 4324.
- Sidnia kinbergi,**
chemical control, field trials, insecticides 8476.
- Siederia rupicolaella,**
rare species, new records, geographical distribution, Sweden 4723.
- Sigara papuensis,**
new species, taxonomy, morphology, Papua New Guinea 4748.
new species, taxonomy, morphology, Papua New Guinea 8800.
- Sigara tadeuszi,**
new records, Papua New Guinea 4748.
- Sigara truncatipala,**
new records, Papua New Guinea 4748.
- Sigma virus,**
disease transmission, *Drosophila melanogaster* 5034.
infection effects on fecundity, *Drosophila melanogaster* 3425.
infection, genetic analysis, *Drosophila melanogaster* 8999.
infection, overwintering, *Drosophila melanogaster* 4203.
infection, population studies, *Drosophila* 3393.
- Signals,**
chemoreceptors, effects on feeding behavior, *Phormia regina* 1737.
- Signiphora coquilietti,**
hyperparasitism, oviposition, webs spinning 7543.
- Silage,**
larvae overwintering, control programs, *Stomoxys calcitrans* 2199.
- Silba,**
larvae, predators, seeds, *Hybanthus prunifolius*, Panama 2080.
- Silica,**
dust, pest control, *Ceratophyllus fasciatus* 9255.
- Silk,**
cocoon construction, *Hyalophora cecropia* 5887.
cocoon, physical properties, correlation, selection, breeding, *Bombyx mori* 9432.
cocoon, physical properties, selection, breeding, *Bombyx mori* 9427.
fibrin crystals, structure, *Bombyx mori* 5719.
parasites exploratory behavior, exposure time, diurnal variations, *Apanteles melanoscelus*, *Lymantria dispar* 1219.
physical properties, *Araneae* 5718.
repellents, interspecific relationships, *Diptera*, *Mallos* 3839.
role, mating behavior, males, *Carthoxus xanthogramma* 4294.
secretion, cocoons, larvae, *Glyphacna* *na* 5016.
secretion, methodology, *Araneae* 8856.
spinning, larvae heads capsules, *Chironomidae* 104.
webs, chemical composition, *Aranea* 196.
webs, host plants effects on, *Tetranychus cinna barinus* 2841.
webs, resting behavior, *Insecta* 5905.
- Silk gland,**
DNA biosynthesis, RNA biosynthesis, protein composition, instars, *Philaemia cynthia ricini* 2727.
fibrin transport, secretion, *Bombyx mori* 3376.
gene expression, mRNA poly(A) containing, cDNA hybridization, larvae, *Bombyx mori* 8112.
glycogen, cynocobalamin, cobalt chloride effects on, *Bombyx mori* 6585.
lipid composition, cynocobalamin, cobalt chloride effects on, *Bombyx mori* 6588.
protein biosynthesis, fibrin, poly(A)-containing mRNA, purification, *Bombyx mori* 8979.
rRNA nucleotide sequence, *Bombyx mori* 2306.
rRNA 5.8S, nucleotide sequence, *Philaemia cynthia ricini* 9388.
rRNA 5.8S, nucleotide sequence, secondary structure, *Bombyx mori* 4177.
rRNA Ala, purification, *Philaemia cynthia ricini* 3872.
- Silk glands,**
weight, cocoons, strains, hybrids, *Bombyx mori* 6963.
- Silphidae,**
carrion attractancy, abundance, species composition 5928
resource partitioning, Canada, Ontario 9209.
- Silviculture,**
effects on growth, diseases resistance, *Pinus strobus*, *Curculionidae* 1393.
pests, damage, defoliation, *Populus*, *Insecta* 5349.
pests, economic importance, models, *Pinus resinosa*, *Neodiprion lecontei*, USA 5413
- Simopion,**
taxonomy, morphology 4026
- Simulation,**
blood meals, rearing, *Triatoma infestans* 2002.
crop fields defoliation, pest control, *Insecta*, *Solanum tuberosum* 3814

- Simulation, (continued)**
temperature effects, development, emergence, *Popillia japonica* 367.
temperature, methodology, laboratories 1684.
- Simulations,**
mathematical models, karyotypes, population genetics, *Tetranychus urticae* 1549.
- Simuliidae,**
taxonomy, morphology 3995.
- Simuliids,**
antennal sensilla, innervation, ultrastructure, larvae 4135.
chromosomes, sex linkage inversions 5457.
control, rivers, water levels effects on, South Africa 669.
larvae, brackishwater environment 5431.
life cycle, development, population dynamics, chemotaxis, hosts, Mammalia 1190.
parasites effects on, pathology, biological control, *Mermithidae* 3403.
pathogens, larvae, Microsporida 1018.
pest control, chemical control, cattle 1359.
pest control, toxicity, bacteria 9013.
population dynamics, life history, environmental effects 1297.
rearing methodology, pupae 4915.
repellents, comparative studies, vectors, disease transmission, Brazil, Amazon Basin 1364.
salivary gland extraction, methodology 67.
seasonal variations, diurnal variations, biting behavior, Guatemala 659.
- Simulium,**
abundance, species composition, activity patterns, West Africa 3630.
biological control, infection, efficacy, *Bacillus thuringiensis* 3005.
biological control, pathogenicity, *Bacillus thuringiensis* 6602.
chemical control, pesticide applications, insecticides, particle size 6185.
geographical distribution, control programs, onchocerciasis, Senegal 9249.
infection, parasites, new species, *Tetrahymena rotunda*, USA, New York 1014.
larvicides, toxicity 9016.
parasites, new records, infection, *Gastromermis*, *Aedes aegypti*, *Culex pipiens* fatigans, *Anopheles stephensi* 4209.
pest control, cattle, repellents efficacy 313.
pollution effects, insecticides, streams 5437.
population dynamics, life history, comparison, biotypes, USA, California 3866.
species identification, enzymes, West Africa 2568.
- Simulium aednei,**
abundance, activity patterns, West Africa 3630.
hatching, temperature effects, duration, eggs, larvae, pupae 1483.
- Simulium amazonicum,**
taxonomy, morphology, medical importance, Brazil 3196.
- Simulium angustipes,**
host-parasite interactions, streams, *Sperchon setiger*, British Isles, England 8313.
- Simulium callidum,**
seasonal variations, diurnal variations, biting behavior, Guatemala 659.
- Simulium canadense,**
records, occurrence, geographical distribution, aquatic environment, USA, California, San Geronio Mts. 1572.
- Simulium cerqueri,**
synonymy, *Simulium pertinax* 3995.
- Simulium chutteri,**
bionomics, instars, developmental stages, body size, morphology, larvae, pupae 4880.
- Simulium damnosum,**
blood meals, man, species identification, enzymes 7326.
mass rearing, methodology 2494.
onchocerciasis vectors, recolonization, breeding sites, Ivory Coast 5269.
rearing, survival, development, sexual reproduction, fecundity 5058.
species identification, enzymes, West Africa 2568.
- Simulium decorum,**
strains, growth, development, geographical distribution, USA 2793.
- Simulium defolardi,**
records, occurrence, geographical distribution, aquatic environment, USA, California, San Geronio Mts. 1572.
- Simulium downsi,**
seasonal variations, diurnal variations, biting behavior, Guatemala 659.
- Simulium equinum,**
host-parasite interactions, streams, *Sperchon setiger*, British Isles, England 8313.
toxicity, insecticides, decamethrin, chlorphoxim, temephos, larvae 5053.
- Simulium evillense,**
abundance, activity patterns, West Africa 3630.
- Simulium fulvotum,**
oviposition, reproductive behavior, life cycle 4330.
- Simulium goeldii,**
taxonomy, morphology 3995.
- Simulium hargrovei,**
abundance, activity patterns, West Africa 3630.
- Simulium incrustatum,**
larvicides, Abate, pest control, larvae, Guyana, Lethem, Buru R 690.
pest control, larvicides, Abate, larvae, Guyana, Lethem, Buru R 690.
- Simulium longistylatum,**
larvae, pathogens, Microsporida 1018.
- Simulium metallicum,**
seasonal variations, diurnal variations, biting behavior, Guatemala 659.
synonymy, *Simulium nitidum* 3196.
- Simulium neavei,**
vectors, eradication, disease control, *Onchocerca volvulus*, Kenya 1327.
- Simulium nigritarse,**
hatching, temperature effects, duration, eggs, larvae, pupae 1483.
- Simulium nitidum,**
synonymy, *Simulium metallicum* 3196.
- Simulium ochraceum,**
onchocerciasis vectors, biological control, pathogenic bacteria, *Bacillus thuringiensis*, Guatemala 626.
seasonal variations, diurnal variations, biting behavior, Guatemala 659.
- Simulium ornatum,**
diet, effects on flight activity 5878.
host-parasite interactions, streams, *Sperchon setiger*, British Isles, England 8313.
pest outbreaks, pollution effects, pest control, insecticides, temephos, France, Neune R. Valley 4546.
toxicity, insecticides, decamethrin, chlorphoxim, temephos, larvae 5053.
- Simulium patricianense,**
taxonomy, new species, morphology, larvae, pupae, Guatemala 1631.
- Simulium penobscotensis,**
habitat, vegetation, colonization, Potamogeton, Sparganium, USA, Maine, Penobscot R 755.
- Simulium pertinax,**
synonymy, *Simulium cerqueri* 3995.
- Simulium quadrifidum,**
taxonomic revision, morphology 3196.
- Simulium ruficornis,**
abundance, activity patterns, West Africa 3630.
- Simulium saetipauli,**
species identification, enzymes, West Africa 2568.
- Simulium sanguineum,**
morphology, adults, developmental stages 3252.
- Simulium sirbanum,**
species identification, enzymes, West Africa 2568.
- Simulium soehrense,**
species identification, enzymes, West Africa 2568.
- Simulium squamosum,**
adults, morphology, identification, vectors 869.
species identification, enzymes, West Africa 2568.
- Simulium tuberosum,**
infection, parasites, new species, *Tetrahymena rotunda*, USA, New York 1014.
population genetics, geographical distribution, cytology, chromosomes 4694.
- Simulium venustum,**
infection, parasites, new species, *Tetrahymena rotunda*, USA, New York 1014.
- Simulium venustum,**
feeding behavior, chemical stimuli, hematophagy 5921.
host, enzyme activity, electrophoresis, *Simulium venustum* 7031.
mouthparts, sensilla, innervation, ultrastructure, females 4142.
- Simulium veredunum,**
loci, enzyme activity, electrophoresis, *Simulium venustum* 7031.
- Simulium vitatum,**
aluminum effects on gene expression 7860.
biological control, infection, efficacy, *Bacillus thuringiensis israelensis* 3756.
filter feeders, functional morphology, hydrodynamics, larvae 4353.
infection, *Tuzetia debaixeuxi* 3405.
polyacetylenes toxicity, photosensitization effects on 295.
- Simulium yahense,**
species identification, enzymes, West Africa 2568.
- Sinidius virus,**
infection, protein biosynthesis, *Aedes albopictus* 8123.
isolation, *Hyalomma anatolicum*, USSR, Tajikistan 9250.
mRNA protein biosynthesis, cell-free system, *Aedes albopictus* 3057.
- Sinentomon chui,**
new species, taxonomy, morphology, Korea 6459.
- Singapore,**
new genera, new species, *Murphyella aliquantula*, *Timbocoris pulchus* 8802.
pesticides (organochlorine), susceptibility, *Culex sitans*, *Anopheles sulciensis*, *Aedes* 5766.
- Singularis,**
synonymy, *Euryurus* 4911.
- Sinigrina,**
effects on feeding behavior regulation, *Schistocerca gregaria* 493.
- Sinophorus alkai,**
morphology, larvae 7261.
- Sinoprosia,**
new genera, morphology, China, People's Rep. 3197.
- Sinoprosia aetolica,**
new species, morphology, China, People's Rep. 3197.
- Sinistachira,**
new genera, taxonomy, China, People's Rep. 847.
- Sinistachira yunnana,**
new species, morphology, China, People's Rep. 847.
- Sipalia lindrothi,**
synonymy, *Geostiba carli* 4787.
- Sipha lava,**
pest resistance, crops, *Digitaria* 4607.
pest resistance, *Digitaria* 9348.
- Siphonanthus,**
larvae identification, morphology, North America 2498.
new records, geographical distribution, USA, Southwest 7113.
- Siphonurus aestivalis,**
life cycle, diapause, feeding, streams, Sweden 3055.
- Siphonurus demareyi,**
taxonomy, new species, morphology, biology, Canada, Nova Scotia 1632.
- Siphonurus lacustri,**
occurrence, streams, acid rain, pollution effects, British Isles, Scotland 8607.
- Siphonurus minnoi,**
new species, taxonomy, morphology, North America 4846.
- Siphonurus typicus,**
morphology, larvae 4846.
- Siphona,**
taxonomic revision, Europe 7180.
- Siphona ingerae,**
new species, taxonomy, morphology, Denmark 7180.
- Siphona maritima,**
new species, taxonomy, morphology, Sweden 7180.
- Siphona mesmili,**
new species, taxonomy, morphology, Denmark 7180.
- Siphona variata,**
new species, taxonomy, morphology, Denmark 7180.
- Siphonaptera,**
bites, hypersensitivity, *Canis familiaris* 2910.
chemical control, insecticides 7637.
hosts, parasites development, *Hepatozoon erhardovae* 4183.
nests entomofauna, *Microgaster minutus* 460.
parasites, check lists, Mammalia, New Zealand 1231.
parasites, chemical control, cythoate 4518.
parasites, detection methodology 2483.
parasites, hosts, *Martes americana*, *Sorex cinereus*, *Eutamias minimus*, *Clethrionomys rutilus*, *Microtus pennsylvanicus*, *Microtus longicaudus*, *Lemmus sibiricus*, *Synaptomys borealis* 2037.
parasites, hypersensitivity, antigens, skin tests, *Canis familiaris* 8406.
parasites, infestation, *Peromyscus maniculatus* 2831.

Siphonaptera, (continued)

parasites, new records, range extension, check lists, Mammalia, USA, Alaska 5530.
 pest control, repellents, thiamine, *Canis familiaris* 7636
 species composition, seasonal variations, parasites, Leporidae, Spain, Ciudad Real 8335

Sitophilidae

Sitophilus, eggs, morphology 7267.

Sitophilidae

defensive behavior, activity patterns, coloration, sound production 6733.

Sitex cyanescens

oviposition, substrate specificity, environmental effects, host plants, Australia 1896

Sitex javanensis

oviposition, substrate specificity, environmental effects, host plants, Australia 1896

Sitex noctilio

development, survival, eggs, larvae, symbiosis, *Amylostereum areolatum* 3470.

oviposition, substrate specificity, environmental effects, host plants, Australia 1896

Sitex chromatin exchange

somatic cell, larvae, *Drosophila melanogaster* 5442

Sitayra

taxonomy, morphology, Brazil, Amazon Basin 4054

Sitayridae

morphology comparison, larvae, 7 species, identification, genera 1710

taxonomy, morphology, Brazil, Amazon Basin 4054

Site location

breeding, substrate preferences, *Chrysophilus*, *Puoliana*, *Rhagio*, *Symphoromyia* 3534.

fruit-marking pheromone, production, *Rhagoletis pomonella* 3353.

pests, *Formica yessensis*, seasonal variations, Korea, Rep., Gyeongsang-Nam-Do, 4449

oviposition, sympatric populations, *Aedes*, Kenya 2868

protein biosynthesis, oogenesis, *Drosophila melanogaster* 394

pupation, natural selection, *Papilio glaucus*, *Battus philenor* 6293

webs, foraging behavior, strategy, *Araneidae*, *Linyphiidae* 5170

Site preferences

feeding, pests, *Apium graveolens*, *Lepidoptera* 8550.

oviposition, host plants, *Heliothis zea*, *Lycopersicon esculentum* 6166

oviposition, larvae, survival, *Chonstoneura fumiferana* 5849

oviposition, pests, *Diabrotica virgifera*, *Diabrotica longicornis*, *Zea mays* 6966.

parasites, domestic animals, *Ixodes scapularis* 6890

Site selection

nesting behavior, colonies, flight activity, *Vespula consobrina* 9357.

oviposition, social interactions, *Bembis pruinosa* 9356.

overwintering, *Phyllotreta cruciferae*, *Psylliodes punctulata*, *Phyllotreta* 3534

oviposition, *Coccophagus* cowpen 2732

oviposition, *Drosophila melanogaster* 405

oviposition, food availability, yeasts, niche pattern, *Drosophila melanogaster* 3530.

oviposition, host plants, *Insecta*, *Lycopersicon esculentum* 2081.

oviposition, host plants, *Orius insidiosus*, *Nabis roseipennis*, *Nabis americanus* 9069.

oviposition, host plants, *Orius tristicolor* 1894.

pupation, environmental factors, population studies, *Drosophila nigrosipracula*, *Drosophila mettleri* 8375.

Sitobion avenae

barley yellow dwarf virus detection, serological tests 6611.

barley yellow dwarf virus, effects on secretion, honeydew 4617.

clones, host plants pest resistance, *Triticum aestivum* 2986.

epidemiology, pest outbreaks, population dynamics, *Metopophium dirhodum*, *Triticum* 4393.

flight activity, phenology, migrations 6826.

hosts, pathogens, *Conidiobolus obscurus* 2621

larvae development, host plants effects on, pest resistance, *Triticum aestivum* 2840

natural enemies, effects on population dynamics, British Isles 8394.

parasites, abundance, *Hymenoptera* 1228.

pest resistance, cultivars, *Triticum* 8567.

pesticide applications effects on population levels, abundance 3724.

pests, effects on plants, *Triticum aestivum* 548.

pests, infestation, effects on yield, *Triticum* 2042.

population growth, phenotypes, altiform nymphs, crowding, host plants developmental stages 6023.

population status, crop fields, British Isles 6927.

predation, natural enemies, effects on population levels, British Isles 8389.

pests, disease transmission, barley yellow dwarf virus 7649.

Stodolopsis moellana

population dynamics, crop fields, Germany, Fed. Rep. 6859.

Sitona

host plants pest resistance, growth, larvae 6902

Sitona flavescens

survival, pest resistance, host plants 6902.

Sitona hispidula

pests, biological control, predators 612

Sitona hispidulus

abundance, activity patterns, seasonal variations, USA, Kentucky 1277

eggs, parasitoids, fecundity, temperature effects, *Patasson lameerei* 2817.

hosts, olfactory stimuli, host searching behavior, parasitoids, *Patasson lameerei* 7537.

spatial distribution, population levels, sampling methodology 5626.

survival, pest resistance, host plants 6902.

Sitophilus

symbiosis, morphology, physiology, genetic factors 5174

Sitophilus granarius

toxicity, methyl bromide, phosphine 1073.

Sitophilus granarius

competition, population growth, productivity, *Sitophilus oryzae* 7595

life history, stored products pests 5152.

pest control, stored products, air flow 6092.

pest control, stored products, insecticides 7768.

pest control, toxicity, insecticides 9257.

pests, stored products, pesticide resistance, Switzerland 6921.

resistance, fumigants, metabolism, methyl bromide 1061.

stored products pests, chemical control, stored products, pests, chemical

Sitophilus granarius, (continued)

control, *Tribolium castaneum*, *Oryzaephilus surinamensis*, *Sitophilus granarius* 5354.

stored products pests, feeding, mortality, temperature effects on 6112.

stored products pests, phosphine toxicity 1051.

stored products pests, phosphine toxicity, atmospheric conditions effect on 1050.

toxicity, insecticides, malathion, pirimiphos, diflufen 5769.

Sitophilus oryzae

breeding success, genetics, inheritance, genes, host plants, *Pisum sativum* 1489.

competition, population growth, productivity, *Sitophilus granarius* 7595.

fecundity, population density, models 1282.

food preferences, food plants, genotypes, *Zea mays* 8544.

food preferences, nutrient utilization, genotypes, *Zea mays* 4358.

host tolerance, exposure, mortality, grasses, Australia 975.

infestation, pest resistance, host plants, *Hordeum vulgare* 7742.

juvenile hormones analogs effects on development 2258.

life history, stored products pests 5152.

pest control, infestation, stored products, mathematical models, environmental factors, *Triticum* 7662.

pest control, stored products, growth regulators 3787.

pest control, stored products, insecticides 2190.

pest control, stored products, temperature 6928.

pesticide resistance, malathion, effects on fecundity, breeding success 5043.

pests, stored products, community composition, seasonal variations, species diversity, Japan 3640.

pests, stored products, growth regulators, residual effects 8572.

pests, stored products, pesticide resistance, Switzerland 6921.

population growth, control programs, pests 5333.

reproduction, stored products pests, *Oryza sativa* 7679.

sex pheromone, attractancy, pest control 7333.

stored products pest control, heat treatments 2251.

stored products pest control, methodology, microwave radiation 3793.

stored products pest control, microwave radiation 3784.

stored products pests, phosphine toxicity 1051.

stored products pests, phosphine toxicity, atmospheric conditions effect on 1050.

stored products pests, population dynamics, *Triticum* 5330.

stored products pests, vertical distribution, oxygen, carbon dioxide effects on 1445.

stored products, *Triticum*, temperature, humidity, effects on survival, fecundity 6977.

toxicity, *Capsicum frutescens* extracts 1065.

toxicity, fumigants, productivity, comparative studies, *Tribolium castaneum* 1074.

toxicity, methyl bromide, phosphine 1073

Sitophilus zeamais

diets, grains, effects on development, population growth 9048.

life history, stored products pests 5152.

pathogens, effects on yield, damage, *Zea mays* 2039.

pests, stored products, chemical control, insecticides, decamethrin 6192.

pests, stored products, *Manihot esculenta*, Malaysia 5386.

population growth, grain, stored products pests 5344.

stored products pest control, microwave radiation 3784.

stored products pests, effects on chemical content, *Zea mays* 3767.

toxicity, methyl bromide, phosphine 1073.

Sitotroga cerealella

chemosterilants, comparison, 15 compounds, toxicity 7399.

development, fecundity, *Zea mays* grain 6102.

eggs, parasites, pest control, biological control, methodology, *Trichogramma*, *Heliothis* 1448

food plants, diets, effects on, growth, development 379.

hosts, parasitoids body size, sex differences, *Trichogramma minutum* 8323.

juvenile hormones analogs effects on fertility, emergence, susceptibility 1062.

mass rearing, methodology 4091.

pest control, stored products, insecticides 2190.

pests, stored products, chemical control, growth regulators, CGA-28772 9331.

pests, stored products, chemical control, insecticides, decamethrin 6192.

pests, stored products, growth regulators, CGA-28772 6103.

plant extracts, volatiles, effects on oviposition, oogenesis, *Zea mays* 4270.

sex pheromone effects on reproductive behavior 424.

stored products pest control, microwave radiation 3784.

stored products pests, effects on chemical content, *Zea mays* 3767.

Sitotroga avocator

new records, India 801

Size distribution

communication systems evolution effects on, *Halicidae*, *Apidae* 748.

Skeletal muscle

action potential, calcium requirements, *Carassius auratus* 111.

electric currents, *Tenebrio* 892.

electrochemistry, electric currents, *Tenebrio molitor* 116.

inactivation, physiology, calcium, *Carassius auratus* 4124.

Skeletal muscles

toxicity, exotoxins, *Centruroides suffusus suffusus* 5055.

Skeleton

venom gland, morphology, *Andrenidae* 93.

Skin

erythema lesions, parasites infestation, rabbits, guinea-pigs, *Ixodes dammini* 8428

sensitization antibodies, infestation, pest resistance, *Sitophilus granarius*, *Haemaphysalis leporispalustris*, *Dermacentor variabilis* 5276.

toxins, venom proteinase activity effects on, man, *Euprocis subflava*, *Euprocis chrysorrhoea* 8178.

Skin diseases

case reports, scabies, Ethiopia 5273.

domestic animals, incidence, treatment, Sudan 2923.

infestation, therapy, man, *Artropoda* 8412

infestation, treatment, *Sarcoptes scabiei*, Ovis, Sudan 2924.

man, domestic animals, *Sarcoptes scabiei*, *Psoroptes*, *Demodex* 2932

man, infestation, *Proctolaelaps pygmaeus*, New Zealand 2171

Skin tests

antigens, hypersensitivity, parasites, *Canis familiaris*, *Siphonaptera* 8406.

Skwala brevis

new records, morphology, eggs, Japan 3860.

Slaterocoris pallipes

geographical distribution, life history, seasonal variations, occurrence, USA 2776

Slavery

adaptiveness, fitness, *Formicidae* 1478

- Slide preparation,**
chironomidae, larvae, glycerine 1688.
- Smicronyx,**
infestation, host plants, phenology, Cuscuta, Pakistan 9157.
- Smicronyx fulvus,**
pests, spatial distribution, host plants, Helianthus annuus 6091.
pests, spatial distribution, host plants, Helianthus annuus 9309.
soil distribution, overwintering larvae, pests, Helianthus annuus 6932.
- Smithurinus elegans,**
habitat selection, leaves morphology 9207.
- Smithurinus carolinensis,**
new species, taxonomy, morphology, USA, South Carolina 1617.
- Smithurinus floridana,**
morphology, adults, USA, South Carolina 4943.
- Smithurinus incognitus,**
new species, taxonomy, morphology, USA, Florida 4821.
- Smittia,**
proteins, characterization, effects on head development, embryos 1085.
- Smittia lasiope,**
morphology, adults, larvae 8031.
- Smittium culicetae,**
commensalism, Anopheles hilli 1008.
pathogens, effects on survival, development, Aedes aegypti 2645.
- Smittium morbosum,**
parasites, infection, Anopheles hilli 1008.
pathogens, larvae infection, Anopheles hilli 1807.
- Smooth muscles,**
contraction, reproductive organs, 5-hydroxytryptamine, proctolin, Tabanus proximus 965.
- Snowshoe hare virus,**
infection, RNA role, Aedes triseriatus 7386.
isolation, Aedes communis, Canada 1017.
- Social behavior,**
aggregation, phonotaxis, Gryllus integer, Gryllus veletis, Teleogryllus oceanicus 7499.
alarm behavior, defensive behavior, communication, nests, Syneca surinama 4305.
anti-prodator behavior, Schizolochus pineti 8293.
castes, colonial characteristics, LasioGLOSSUM zephyrum 6216.
castes, colonial characteristics, LasioGLOSSUM zephyrum 7003.
castes, queens pheromones effects on, Apis mellifera 3044.
chemical communication, pheromones, Periplaneta americana 5119.
colonial characteristics, genetic relationship, measuring techniques, Insecta 7871.
colonial characteristics, interspecific relationships, raiding behavior, Chalepoxenus muellerianus 6994.
colonial characteristics, queens, workers, Apis mellifera 3051.
colonies, toxicants effects on, Solenopsis invicta 1942.
competitive behavior, conferences, Insecta 1583.
defense mechanisms, agonistic behavior, Apicotermitinae 6219.
dominance, castes, colonies, Bombus terrestris 5419.
dominance, olfactory stimuli role, Nauphoeta cinerea 8596.
foraging behavior, morphology, nests, Dorylineae 5425.
foraging behavior, Staphylinidae 5558.
foraging behavior, territory, Myrmecocystus mimicus 1999.
imprinting, attachment, queens, colonies, Vespa orientalis 745.
mating behavior, genetics, Apis mellifera, Melipona quadrifasciata 1543.
nest building, colonies, Reticulitermes lucifugus 4650.
nesting behavior, colonial characteristics, Xylocopa pubescens 7007.
nests, Vespa affinis, Thailand 2281.
pheromones, sensitivity, bioassays, Solenopsis invicta 1162.
sanitation, excretory products distribution, Mallos gregalis 2143.
sex ratio, kin selection, Hymenoptera 3048.
sound production, dispersal, Cystosoma saundersii 2283.
- Social environment,**
effects on auditory communication, phonotaxis, breeding success, Palmaricnixa nana 9077.
effects on food consumption, growth, Acheta domesticus 8275.
- Social hierarchies,**
dominance, olfactory stimuli role, Nauphoeta cinerea 8596.
- Social hierarchy,**
dominance, aggressive behavior, Teleogryllus oceanicus 4652.
dominance, Parischonaster nigricans serrei 5111.
pleometrotic foundations, haplometrotic foundations, sexual reproduction, breeding success, Polistes gallicus 5423.
- Social interactions,**
conspecifics, Reticulitermes 413.
copulation time, parasitism, Trichopoda pennipes, Nezara viridula 1898.
nesting behavior, site selection, Bemix pruinosus 9356.
Trypangulum nudum schultzei, Trypangulum lactiarum, Trypangulum saussurei, Costa Rica 6986.
- Social organization,**
altruism, kin selection, behavioral genetics, Insecta 7028.
caste differentiation, feeding behavior, division of labor, Pogonomyrmex owyheei 2282.
colonial characteristics, activity patterns, Mallos gregalis 9354.
colonial characteristics, LasioGLOSSUM zephyrum 5421.
males, workers, evolution, Hymenoptera 3648.
reproductive strategy, mathematical models, Hymenoptera 3050.
sex ratio, kin selection, Hymenoptera 3048.
spatial distribution, singing sites, aggregation behavior, population density, males, Amblycorypha parvipennis 2286.
sterility, fertility, queens, Leptothorax proxancheri 2285.
territorial behavior, interspecific relationships, silk repellents, Dictyna, Mallos 3839.
trophallaxis, nest provisioning, brood care, environmental effects, Tapinoma erraticum 4653.
- Social spacing,**
sound production, courtship, Cystosoma saundersii 2283.
- Social structure,**
colonial characteristics, queens, Leptothorax nylanderi 4648.
- Society I-a,**
taxonomy, new species, 30 species, 6 subspecies, Trypangulum 831.
- Socio-economic aspects,**
disease transmission, trypanosomiasis, Glossinidae, Africa 652.
integrated control development, resource management 5385.
man, epidemiology, Pediculus humanus, Malaysia 657.
- Socio-economic aspects, (continued)**
pest control, pheromone traps, Spodoptera littoralis, Egypt, Arab Rep. 8490.
- Sodium,**
channels, giant axons, palytoxin effects on, Periplaneta americana 8176.
hemolymph, sex differences, Schistocerca gregaria 6571.
ion exchange, distribution, digestive tract, Acrididae 239.
requirements, sex differences, mud feeding, Pteris rapae, USA, Pennsylvania 4346.
- Sodium channels,**
axons, tetrodotoxin binding, temperature-sensitive mutant, Drosophila 9415.
Centruroides suffusus neurotoxins effects on, nerves, frogs, brain, rats 8175.
- Sodium currents,**
axons, Periplaneta, Butthos judacicus venom toxins effects on 8182.
- Softwoods,**
food preferences, decay fungi effects on, Coptotermes acinaciformis 1196.
- Sogatella furcifera,**
eggs, nymphs, parasitoids, life cycle 9136.
host plants, pest resistance, genetic analysis, Oryza sativa 9280.
Pests, China, People's Rep., E. China Sea 1443.
symptoms, yeasts like microorganisms 1215.
wings, morphometry, identification 5640.
- Sogatella kolophon,**
vectors, disease transmission, maize sterile stunt virus 7646.
- Sogatella longifurcata,**
mass rearing, diets, methodology 2485.
vectors, disease transmission, maize sterile stunt virus 7646.
- Soil,**
abundance, herbicides effects on, nontarget organisms, Arthropoda 5259.
assemblages, Cicadellidae, USA, Pennsylvania 5229.
association, Collembola, Mexico 2167.
bioassays, toxicity testing, insecticides, larvae, Diabrotica undecimpunctata 4220.
colonial characteristics, nesting behavior, swarming behavior, Isoptera, India 5426.
community composition, Collembola, India, West Bengal 5252.
community composition, insecticides effects on, Arthropoda, USA, California 2149.
conferences, Arthropoda 5541.
crop fields, insecticides, carbofenar, persistence 8521.
distribution, overwintering larvae, pests, Smicronyx fulvus, Helianthus annuus 6932.
ecological distribution, roots, host plants, Aphididae, India 5258.
forests, abundance, environmental factors, Cryptostigmata, Mesostigmata, Australia 2881.
forests, distribution, Cryptostigmata, Mesostigmata, Australia 4472.
forests, nuclear polyhedrosis virus survival, transmission, Orygia pseudosugata, USA, California 2880.
forests, population dynamics, abundance, community composition, Acan 6000.
horizontal distribution, population dynamics, parasites, Steinernema kraussei, Cephalobus abietis 9173.
infection, susceptibility, biological control, Neoplectana carapocapse, Spodoptera citigua 6160.
insecticides effects on community composition, nontarget organisms 5260.
new records, geographical distribution, Oribea, India, Orissa 9487.
occurrence, night, Cicadellidae, USA, Pennsylvania 9104.
organic matter, leaf litter, feeding behavior, Jonespeltis splendens 9129.
pest control, overwintering populations, fumigation, Leptinotarsa decemlineata 2263.
pesticide residues, effects on larvae, Diabrotica longicornis, Diabrotica virgifera 3740.
pesticide residues, effects on nontarget organisms, Musca domestica 2656.
pesticide residues, methoposol, toxicity 7709.
pests, species composition, Insecta, India, Dharwad 5366.
phorate degradation, temperature, bioassays, Drosophila melanogaster 7402.
sampling methodology, Scaptomyza aculeus, Scaptomyza vicinus 4072.
species composition, abundance, Camellia sinensis crop fields, Arthropoda 5428.
- Soil amendment,**
mulches, effects on abundance, Empoasca 1287.
- Soil characteristics,**
effects on pathogenicity, formulations, pest control, Bacillus thuringiensis israelensis, Culex 7671.
- Soil fauna,**
agricultural ecosystems, species composition, Insecta, Egypt 7011.
autecology, mining land reclamation, Oppelia nova, Mixochthonus latipes, British Isles, England 8597.
autecology, species composition, Curculionidae, Asia 8599.
Collembola, effects on soil microorganisms abundance 5266.
community composition, Arthropoda, Japan 8600.
community structure, population density, factors affecting, crop fields, India, Varanasi 4443.
Cryptostigmatidae, vegetation effects on community structure, India, West Bengal, Santiniketan 4442.
ecological distribution, population density, overwintering, Thysanoptera, USA, Illinois 9367.
environmental effects, land use, population levels, Collembola, Oribea, USSR, Kolikhda 7010.
enzyme activity, nutrient dynamics, Isopoda, Diplopoda 9368.
extraction methodology, Diabrotica 2488.
forests, community composition, environmental factors, Acari, India, Kashmir 7009.
indicator species, toxicity tests, ecosystem dynamics, Collembola, Coleoptera, Diptera 5761.
leaf litter decomposition, nutrient cycles, Arthropoda, USA, Alaska 5989.
new genera, new species, Cladonia miranda, Monelata incipiens, Basalis, 6 species, India, Sri Lanka 4883.
orchards, community composition, distribution, Arthropoda 7008.
population dynamics, seasonal variations, Arthropoda, Czechoslovakia 7599.
trophic relations, predators, sampling methodology 6860.
- Soil fertility,**
semi-arid environments, savannahs, Macrotermes michaelseni 5988.
- Soil microorganisms,**
abundance, soil fauna effects on, Collembola 5266.
prairies, detritus processing, USA, Wisconsin 2287.
- Soil moisture,**
effects on emergence, Pectinophora gossypiella 6013.
effects on pupae survival, Dacus opitiae, Dacus tenuifascia 1305.
effects on survival, development, eggs, larvae, Popillia japonica 1864.
habitat preferences, oviposition, Chortogon trachypterus 5103.

- Soil moisture, (continued)**
oviposition, substrate preferences, *Chrotogonus* tra 2734.
pits construction, predation, larvae, *Myrmecoleon immaculatus* 5126.
- Soil nutrients,**
organic matter, soil properties, *Psammotermes hybostoma* 6017.
- Soil pH,**
effects on abundance, community composition, Oribatidae, India, West Bengal 5250.
- Soil pollution,**
indicator species, toxicity tests, Collembola 5047.
- Soil properties,**
colonies effects on, Trivertirmes trivertoides 6825.
colonization, environmental conditions, forests, Formica yessensis, Korea, Rep., Gyeongsang-Nam-Do 4438.
effects on abundance, community composition, Collembola, India, West Bengal 5253.
effects on abundance, community composition, Oribatidae, India, West Bengal 5250.
effects on population dynamics, abundance, plantations, Cryptostigmidae 5249.
effects on pupae survival, Dacus opillae, Dacus tenuifascia 1305.
eggs, larvae, Popillia japonica 1864.
humification, leaf litter decomposition, Jonespeltis splendendus 5248.
mounds, nest building, Isoptera, Pakistan 9369.
organic matter, soil nutrients, *Psammotermes hybostoma* 6017.
- Soil salinity,**
effects on abundance, community composition, Oribatidae, India, West Bengal 5250.
- Soil temperature,**
burrowing behavior, pits construction, Myrmecoleon immaculatus 6223.
effects on diapause termination, eggs, Delia coriaria 3473.
effects on emergence, Pectinophora gossypiella 6013.
effects on mortality, pupation, reproduction, Pectinophora gossypiella 6167.
effects on survival, pupae, Dacus opillae, Dacus tenuifascia 1305.
environmental effects, overwintering eggs development, Diabrotica virgifera virgifera 1843.
pasture defoliation, effects on population levels, Costelytra zelandica 545.
phenology, Acanthus spinulosus 1967.
- Soil texture,**
effects on survival, development, eggs, larvae, Popillia japonica 1864.
- Soil types,**
oviposition, substrate preferences, *Chrotogonus* tra 2734.
- Soils (calcareous),**
beech bark disease incidence, Cryptococcus fagisuga, Fagus 2964
- Solanaceae,**
host plants, pests, galls, Eriophyes cladophthirus 6910.
- Solanum,**
pest resistance, cultivars, Myzus persicae 4633.
- Solanum berthaultii,**
pest resistance, effects on population dynamics, oviposition, development, Lepinotarsa decemlineata 4407.
pest resistance, larvae survival, Lepinotarsa decemlineata 8548
- Solanum carolinense,**
host plants, flowering phenology, effects on infestation, Solanum carolinense 2839.
host plants, Frumeta nundinella, USA, Virginia 4329
- Solanum dulcamara,**
host plants, leaves, feeding behavior effects on, Eriophyes cladophthirus 1236.
- Solanum melongena,**
host plants, susceptibility, pests, Leucinodes orbonalis 7710.
host plants, varieties, pest resistance, Leucinodes orbonalis 7676
yield, pests, infestation effects on, Empoasca lybica 8485
- Solanum nigrum,**
tomato yellow leaf curl virus, disease transmission, vectors, Bemisia tabaci 7655
- Solanum nodiflorum mottle virus,**
transmission, coleoptera 278
- Solanum pallidicarpum,**
flowering phenology, pollination 4411
- Solanum penellae,**
pest resistance, wild type, Trialeurodes vaporariorum 9283.
- Solanum tuberosum,**
crop fields, chemical control, Elatichrosis, Cryptohypnus, Ctenocera 3829
crop fields, defoliation, pest control, Insecta 3814.
crop fields, insecticides effects on potato leaf roll virus, abundance, Aphididae 3042.
cultivars, pest resistance, effects on larvae growth, Phthorimaea operculella 539.
feeding damage, pests, Myzus persicae 8543.
flowers, cross-pollination, efficiency, Apis mellifera, Bombus fervidus, Bombus impatiens 1285.
host plants, pest resistance, screening, Phthorimaea operculella 3824.
pest resistance, comparison, Solanum berthaultii, Lepinotarsa decemlineata 8548.
pests, integrated control, reviews, Insecta 6209.
pests, population dynamics, Myzus persicae, Aphis gossypii, Empoasca decipiens, Egypt 6958.
resistance, age effects, infestation, Empoasca fabae 3597.
- Solanum tuberosum,**
host plants, rearing methodology, Pseudaulacaspis pentagona 1693.
- Solanum xanthocarpum,**
extracts, pest control, efficacy, Bagrada cruciferarum 7682.
- Solar power,**
satellites, environmental impact, microwave radiation, longevity, food consumption, Apis mellifera 7502.
- Solar radiation,**
absorption, melanism, diel activity, Colias 6536.
effects on activity patterns, Apis mellifera 4452.
effects on, thermoregulation, webs, orientation, Micrathena gracilis 1918.
heating, hives, apiculture 2998.
- Solenobia charottae,**
rare species, new records, geographical distribution, Sweden 4723.
- Solenobia fumosella,**
rare species, new records, geographical distribution, Sweden 4723.
- Solenobia lichenella,**
rare species, new records, geographical distribution, Sweden 4723.
- Solenopsis,**
insecticides effects on mounds movements 2652.
interspecific relationships, association, Myrmecaphodius excavaticollis 9218.
stings, medical importance, economic importance, man 6893
- Solenopsis aurea,**
geographical distribution, ecological distribution, colonies, USA, Texas 6995.
- Solenopsis carolinensis,**
new species, taxonomy, morphology, USA, Florida 8817.
- Solenopsis geminata,**
geographical distribution, ecological distribution, colonies, USA, Texas 6995.
interspecific relationships, defense mechanisms, Reticulitermes flavipes, Reticulitermes virginicus 1795.
larvae, parasites, pathology, Burenella dimorpha 279.
predators, biological control, eggs, Diabrotica, Costa Rica 2993.
wings removal effects on crop biochemical characteristics 1754.
- Solenopsis invicta,**
abundance, nectar effects on, Gossypium 5971.
anti-predator behavior, defensive behavior, Myrmecoleon 6836.
bait, pest control, toxicants, Ell-468, Ell-Lilly 3437.
chemical control, pest control, bait toxicity 2991.
colonial characteristics, food sources, distribution 2274.
colonial characteristics, nutrients effects on feeding behavior 1991.
colonial characteristics, polymorphism, body size, castes 2275.
colonial characteristics, queens, USA, Texas, Madison Co. 9365.
colonies, food preferences, oils 1992.
colonies, toxicants effects on queens, social behavior 1942.
egg production, parthenogenesis, hormones effects on 1888.
filtration, particle size, food composition 1993.
geographical distribution, ecological distribution, colonies, USA, Texas 6995.
maturation, oogenesis, pheromones effects on inhibition 390.
nests, colonial characteristics, new records, geographical distribution, Puerto Rico 4642.
pest control, chemical control, amidinohydrazone efficacy 2193.
pest control, chemical control, toxicants, efficacy 2192.
pest control, efficacy, Ambro bait 9311.
pests, bibliographies, USA 7929.
pests, mounds, pastures, control programs, destruction 1460.
pheromones, sensitivity, bioassays 1162.
predation, biological control, Anthonomus grandis 2200.
predation, eggs, Arix spona 6858.
predation, eggs, Heliothis virescens, USA, Texas 6124.
predator-prey interactions, Chalcedermus aeneus 591.
predators, biological control, pest control, Nezara viridula 3790.
queens, biochemical characteristics, colonization 5716.
queens, chemical composition, secretion, post-pharyngeal gland 987.
stings, medical importance, man, USA, Georgia, Ft. Stewart 6886.
temperature effects on predation, eggs, Heliothis virescens 9127.
trail pheromone, identification, Dufour's gland 2597.
- Solenopsis richteri,**
wings removal effects on crop biochemical characteristics 1754.
- Solenopsis richteria,**
pests, bibliographies, USA 7929.
- Solenopsis texana,**
competition, Apoccephalus parasites effects on, Phendole dentata 3576.
- Solenopsis wasmanni,**
chemical control, pest control, bait toxicity 2991.
- Solenopsis xyloni,**
geographical distribution, ecological distribution, colonies, USA, Texas 6995.
pest control, orchards, Prunus amygdalus, USA, California 6907.
- Solidago,**
host plants, host-parasite interactions, clones, herbivores, Uroleucon caligatum 5963.
- Solidago altissima,**
defoliation, Publilia concava effects on infestation, Triterhoda 2073.
- Solidago juncea,**
host plants, effects on predation, Misumena vatia 457.
- Solomon Is.,**
food preferences, alkaloids sequestering, Danainae 8304.
new species, taxonomy, morphology, 8 species, Palaorhiza 4885.
- Solomon Is., Nissan I.,**
new species, taxonomy, morphology, Vargatula pacifica 8730.
- Solomon Is.,**
new species, taxonomy, morphology, Brachypogon kraussi, Brachypogon tokunagai, Dasyhelea forsteri 7176.
- Solubility,**
Autographa californica nuclear polyhedrosis virus, digestion fluids, Trichoplusia n 4201.
- Solutes,**
concentration, water absorption, frontal bodies, Arenivaga 7352.
- Somatochora alpestris,**
karyotypes, chromosomes morphology, variation, Switzerland 1521.
- Song,**
acoustic communication, computer applications, Cystosoma saundersii 1159.
acoustic responses, stridulation frequency, neurons, cerci, Gryllus campestris 4972.
auditory communication, Cicadetta sinuata 2759.
auditory communication, geographical variations, reproductive isolation, Muellerianella 8266.
auditory communication, Gromphadorhina chopardi 8270.
auditory communication, Nezara viridula 8271.
courtship, genetics, Drosophila melanogaster, Drosophila simulans, Drosophila mauritiana 3536.
males, spatial distribution, reproductive behavior, Cystosoma saundersii 2748.
phonotaxis, aggregation, Gryllus integer, Gryllus veletis, Teleogryllus oceanicus 7499.
phonotaxis, landing behavior, orientation, Scapteriscus aculeus 1926.
variants, populations, hybrids, Chorthippus mollis 2755.
- Southonaxia maenas,**
chromosome number, diploidy, chromosome B, India 7036.
- Sophiothrips,**
taxonomy, morphology, phylogeny 5610.
- Sophiothrips aleurodisi,**
new species, taxonomy, morphology 5610.
- Sophiothrips duvali,**
new species, taxonomy, morphology 5610.
- Sophiothrips greeniadel,**
new species, taxonomy, morphology 5610.
- Soretoneura,**
taxonomy, morphology, geographical distribution, New Guinea 837

- Soreutoneura daedala**, morphology, geographical distribution, taxonomy, New Guinea 837.
- Sorex cinereus**, parasites, species composition, *Orycteroxenus sorici*, Myobiidae 9149.
- Sorex longirostris**, hosts, new species, *Protonybia indianaensis*, USA, Indiana 1591.
- parasites, species composition, *Orycteroxenus sorici*, Myobiidae 9149.
- Sorghum**, crop fields, environmental effects, population dynamics, *Schizaphis graminum*, USA, Missouri 6151.
- damage, pests, control programs, *Atherigona*, Sudan 4562.
- rough, feeding, effects on yield, *Schizaphis graminum* 727.
- food organisms, effects on larvae survival, *Atherigona soccata* 358.
- host plants, genotypes, pest resistance, *Schizaphis graminum* 6153.
- host plants, population density, effects on oviposition, survival, *Atherigona soccata* 6104.
- pest attack, damage, *Diatraea saccharalis* 6080.
- pest control, control programs, rearing programs, *Atherigona soccata* 4556.
- pest resistance, larvae development, mortality, *Atherigona soccata* 4565.
- pests, abundance, seasonal variations, *Atherigona soccata*, Nigeria 4560.
- pests, incidence, *Atherigona soccata*, China, People's Rep. 4559.
- pests infestation effects on yield 6164.
- yield, feeding damage, pests, *Oebalus pugnax* 8506.
- Sorghum arundinaceum**, host plants, population dynamics, *Atherigona soccata*, Kenya 4432.
- Sorghum bicolor**, crop fields, pest control, insecticides, *Chilo partellus* 7670.
- damage, pests, *Nezara viridula*, *Chlorochroa ligata*, *Leptoglossus phyllopus* 8581.
- fertilizer applications, effects on damage, *Schizaphis graminum* 8510.
- grain, pests, population growth, *Heliothia armigera* 5329.
- host plants, genotypes, infestation, *Spodoptera frugiperda* 6127.
- host plants, lipids, deterrents, pest resistance, *Locusta migratoria* 5290.
- host plants, oviposition, eggs distribution, *Atherigona soccata* 4288.
- host plants, pest resistance, biochemical characteristics, *Atherigona soccata* 7740.
- host plants, pest resistance, feeding behavior, *Schizaphis graminum* 6096.
- host plants, varieties, pest resistance, *Chilo partellus* 7732.
- pest resistance, biochemistry, *Insecta* 4564.
- pest resistance, characterization, *Oligonychus pratensis* 4588.
- pest resistance, feeding deterrents, *Schizaphis graminum* 5294.
- pest resistance, host plants, *Oligonychus pratensis* 4589.
- pest resistance, seedlings, morphology role, *Atherigona soccata* 7719.
- seeds, carbofuran, pest control, *Atherigona soccata* 5358.
- Sorghum stunt mosaic virus**, vectors, disease transmission, *Graminella sonora* 7659.
- Sorghum vulgare**, crop fields, host plants, *Heteroptera* 2097.
- host plants, oviposition, substrate preferences, *Atherigona soccata* 7483.
- host plants, pest resistance, anthrax, *Atherigona soccata* 7751.
- pests, pathogens incidence, *Spodoptera frugiperda*, *Heliothis zea*, USA, Georgia 3407.
- seeds viability, chemical control, pests, *Atherigona* 7782.
- varieties, pest resistance, *Chilo partellus* 7784.
- Sorotrichus**, morphology, *Lutrichus*, morphology 7270.
- Sotekia**, new genera, taxonomy 7155.
- Sotekia minima**, new species, taxonomy, morphology, Borneo 7155.
- Sound**, effects on movements, *Heliothis armigera* 9081.
- frequency, bioacoustics, stridulatory apparatus, *Hemideina*, *Deinacrida* 5020.
- traps, sampling methodology, *Scaptomyza aculeus*, *Scaptomyza vicinus* 4075.
- Sound production**, aggregation behavior, movements, spatial distribution, males, *Neoconocephalus* 9361.
- auditory communication, *Gromphadorhina chopardi* 8270.
- calling behavior, reproductive isolation, *Nephotettix cinctipes*, *Nephotettix virescens*, *Nephotettix nigropictus*, *Nephotettix malayanus* 7498.
- defensive behavior, activity patterns, *Sipyloides sylvius* 6733.
- social spacing, courtship, *Cystoosoma saundersi* 7283.
- stridulation, communication, acoustics, *Conischa* 8615.
- stridulation, *Eupholodoptera chaberti* 8773.
- stridulation, workers, *Leptothorax muscorum* 1921.
- variability, auditory communication, *Drosophila nasuta* 1164.
- Sound production (biological)**, age, hunger effects on, *Glossina moritans* 260.
- auditory communication, *Glossina* 2757.
- auditory communication, males, *Zonocerus variegatus* 2615.
- auditory communication, song, *Cicadetta sinuipennis* 2759.
- diurnal variations, tropical environment, *Cicadidae* 5117.
- mating behavior, aggressive behavior, *Orchelimum gladiator*, *Dissostera carolina* 1151.
- muscles, action potential, *Cyclochila australasiae*, *platylepis capitata* 264.
- nerve, defense mechanism, *Synoeva yuana* 3847.
- patterns, diurnal variations, *Glossina morsitans* 261.
- stridulation mechanisms, *Tesseraotoma javanica* 263.
- Source**, colonization, geographical distribution, *Drosophila subobscura*, Chile 1578.
- effects on population stability, rearing, *Glossina pallidipes*, Kenya 574.
- sex hormones, neuroendocrine system cells, *Rhodnius prolixus* 964.
- South Africa**, abundance, seasonal variations, *Copidosoma koehleri*, *Anteples subandus* 2122.
- case reports, occurrence, man, *Boophilus decoloratus*, *Rhipicephalus evertsi* 1367.
- colonies, new records, geographical distribution, *Trigona* 2372.
- ethology, *Dasyproctus* 471.
- infestation, dogs, seasonal variations, *Rhipicephalus sanguineus*, *Ctenocephalides* 9247.
- morphology, new species, *Phlebotomus rousetti* 1627.
- new genera, new species, *Annekcoris brunneus* 8801.
- new species, new subspecies, *Pseudonympha camdeboo*, *Lepidochrysops jamesi* 4832.
- new species, *Poecilimys nigricans* *zwartbergae*, *Poecilimys palmus* *margueritae* 8837.
- new species, taxonomy, morphology, *asterolecanii*-group, 26 species, *Metaphycus*
- South Africa, (continued)** 4874.
- new species, taxonomy, morphology, *Encyrtus aquilus*, *Encyrtus melas* 8824.
- new species, taxonomy, morphology, *Habropogon capensis*, *Hermannomyia oldroydi* 4832.
- new subspecies, taxonomy, morphology, *Lepidochrysops jamesi* 4832.
- parasites, *Encyrtidae*, *Antonia grammis* 2029.
- parasites, incidence, *Arthropoda*, *Antodora marsupialis* 9146.
- parasites, morphology, identification keys, *Haemaphysalis cooley* 3259.
- parasitism, larvae, *Cerambycidae*, *Ycaploca evansi* 5178.
- population dynamics, seasonal variations, feeding, production, *Acrididae* 8365.
- reproductive behavior, life history, *Masande* 470.
- savannahs, leaf litter decomposition, role, *Isopora* 9199.
- Simulidae* control, nvers 669.
- transmission, pathogens, *Theileria mutans*, *Amblyomma hebraeum* 665.
- South Africa, Clanwilliam**, nests, (ossis), *Pleistocene* epoch, *Hodotermutidae* 5540.
- South Africa Coast**, biogeography, islands, species richness, *Araneae* 6848.
- South Africa, Orange Free State**, seasonal variations, abundance, spatial distribution, females, *Culex* 5284.
- species richness, abundance, *Culex theileri*, *Aedes juppi*, *Aedes durbanensis* 5282.
- South Africa, Transvaal**, new species, taxonomy, morphology, *Ceratopogonidae* 8796.
- new species, *Timberlakeia signata*, *Timberlakeia giva* 8822.
- South Africa, Western Cape Region**, pests, morphology, *Acia lineatiformis* 4944.
- South America**, collections, Natural History Museum of Geneva, species composition, *Mantispinae*, *Platyspinae* 7883.
- disease transmission vectors, aging methods 4493.
- geographical distribution, introduced species, *Apis mellifera* 3948.
- geographical distribution, morphology, *Ozophora atripora* 2370.
- geographical distribution, new records, *Hydora*, taxonomy, new species, *Hydora* 3167.
- geographical distribution, *Podagronia* 1654.
- keys, morphology, taxonomy, 15 new species, *Holotrichus* 7958.
- larvae association, *Anura* eggs, *Diptera* 7816.
- life cycle, *Phenacoccus manihoti*, biology, ecology 440.
- morphology, *Pyrrhopyge* *cren* 4939.
- new genera, new species, *Leptochorini* 5575.
- new genera, new species, taxonomy, morphology, *Tenebrionidae* 7949.
- new records, new species, ecological distribution, *Cerionus* 1046.
- new species, taxonomy, morphology, *Campephiloceros atyoc*, *Campephiloceros paraguayensis* 7144.
- new species, taxonomy, morphology, *Cicadellidae* 7982.
- new species, taxonomy, morphology, *Culicoides* 4844.
- 28 new species, taxonomy, morphology, *Curatra* 7200.
- new species, taxonomy, morphology, *Deltocephalinae* 5587.
- 32 new species, taxonomy, morphology, *Glyptina* 7205.
- new species, taxonomy, morphology, *Gypsonia* 7984.
- new species, taxonomy, morphology, *Xestoccephalinae* 5588.
- new species, 5 species, new records, geographical distribution, *Diachlorus* 7970.
- parasites, geographical distribution, *Myiomyia*, *Chiroptera* 10.
- parasites, new records, *Allantomenidae*, *Polysyllus* *tripus* 291.
- pests, killer bees, *Apis mellifera* *adansoni* 4617.
- pests, species composition, ecological distribution, *Scolytidae*, *Platypodidae* 7222.
- taxonomy, morphology, *Acrididae* 1671.
- taxonomy, morphology, *Neobidessus* 4817.
- South America, Amazon R.**, new genera, new species, *Caladomyia* 4838.
- new genera, new species, morphology, *Coryphobates* 3206.
- South America, Amazon R. Basin**, new species, taxonomy, morphology, *Bakerius amazonicus*, *Bakerius maculatus* 4862.
- new species, taxonomy, morphology, *Protosyllus* 7235.
- taxonomy, morphology, keys, *Micropeziidae* 4830.
- Southeast Asia**, biological control, pests, *Homoptera* 1451.
- new records, geographical distribution, *Erioremes* 3149.
- new species, taxonomy, morphology, *Marasmia patnalis* 842.
- Soybean mosaic virus**, disease transmission, vectors landing behavior, *Aphididae*, *Glycine* *max* 3825.
- Spacecraft**, exhausts, effects on indigenous species, *Insecta*, USA, Florida 6692.
- Spain**, check lists, species composition, *Lepidoptera* 7081.
- chromosomes, deficient mutants, *Stauronemus scalaris* 7034.
- geographical distribution, *Celerio ephorbiae* 7096.
- geographical distribution, occurrence, *Allodynerus koenigi* 9458.
- historical account, bibliographies, geographical distribution, morphology, *Hippodamia* 3142.
- house dust entomofauna distribution, *Pyrogliphiidae* 575.
- karyotypes, chromosomes, *Carabidae* 3890.
- mating behavior, circadian rhythms, geographical variations, *Acroleptopsis* *assuetella* 5107.
- new records, geographical distribution, *Anthracinus euphenoides*, *scutellantes* *crion* 3138.
- new records, geographical distribution, *Melittaea deione*, *Hodes titanus*, *Iolana* *solas*, *Plebejus argus*, *Cyanaris semurgus*, *Oegenes notrodamus*, Spain 7076.
- new records, parasites, *Phenocentropus ruber*, *Colpoccephalum heterosoma*, *Tritonot* *femoratum*, *Anatolica phenocentropi*, *Anatoecus pygaspis* 8336.
- new species, new records, geographical distribution, *Xanopsis guadarrensis* 13.
- new species, taxonomy, bionomics, *Phytophthorus pansap* 8763.
- new species, taxonomy, morphology, *Anisopocus meridionalis* 8003.
- new species, taxonomy, morphology, *Coria iberica* 5576.
- new species, taxonomy, morphology, *Ptycha hispanica* 4908.
- new species, taxonomy, morphology, *Stenomastoma udeba* 7931.
- parasites, morphology, keys, 10 species, *Bruchia* 8047.
- parasites, morphology, *Myrsidea rustica*, *Phyloterus* 8046.
- parasites, morphology, *Ricinus rubecula*, *Eritrichus rubecula* 4103.
- parasites, new records, *Vasellus vasellus*, *Acrotiphidophorus gracilis*, *Quadriceps* *juncus*, *Saemundsdonia temporalis* 8334.
- polymorphism, coloration, *Euphydryas aurinia* *trilensis*, *Melittaea trivialis* *ventralensis* 6501.
- surveys, geographical distribution, *Hylotus pinasti* 3140.

- Spain, (continued)**
taxonomy, systematics, Tineidae, Symmoceridae, Pterophoridae 2466.
- Spain, Catalunya,**
population studies, morphology, biogeography, *Autographa bractea* 7082.
- Spain, Ciudad Real,**
parasites, seasonal variations, species composition, Leporidae, Ixodidae, Siphonaptera 8333.
- Spain, Donana Biological Reserve,**
seasonal variations, species composition, Rhopalocera 6865.
- Spain, Granada,**
parasites, morphology, biometrics, *Alectoris rufa*, *Goniodes dispar* 8051.
population levels, pheromone traps, correlation, infestation, *Prays oleae* 9281.
- Spain, Guadalajara,**
records, taxonomy, morphology, Lepidoptera 7080.
- Spain, Huesca,**
check lists, species composition, Lepidoptera 7079.
- Spain, Huesca Province,**
surveys, ecological distribution, Lepidoptera 3139.
- Spain, Iberian Peninsula,**
life cycle, taxonomy, *Elkneria pudibunda* 5157.
taxonomic revision, Micropterigidae 2467.
- Spain, Pyrenees Mts.,**
check lists, species composition, Coleoptera 7075.
- Spain, Santander, Tresvies,**
cavernicolous species, new genera, new species, *Oncocnema falceper* 4824.
- Spain, Teruel, Morade Rubielos,**
new records, geographical distribution, check lists, Curculionidae 5518.
- Spain, Valencia,**
fruit trees, pests, biological control, *Aphytis lepidosaphes*, *Leptomastidea* 1458.
- Spalacarus (Tetololstrophorus),**
new genera, morphology 2384.
- Spalangia cameroni,**
parasites, reproduction, survival, *Stomoxys calcitrans* 9141.
parasitoids, host searching behavior, chemical stimuli, *Musca domestica* 8319.
parasitoids, reproduction, hosts, *Stomoxys calcitrans* 5181.
pupae parasites, biological control, *Musca domestica* 708.
- Spalangia drosophilae,**
parasites, hosts effects on development, Diptera 2116.
pupae parasites, biological control, *Musca domestica* 708.
- Spalangia edulis,**
parasites, population dynamics, pest control, *Musca domestica* 6903.
parasitoids, host searching behavior, chemical stimuli, *Musca domestica* 8319.
pupae parasites, biological control, *Musca domestica* 708.
- Spalangia nigrocoeca,**
pupae parasites, biological control, *Musca domestica* 708.
- Spanglergyrus albiventris,**
life history, habitat, ecological distribution, USA, Alabama 5139.
- Spartina,**
community composition, Insecta, salt marshes, herbivores, nutrient enrichment 2290.
- Spartina alterniflora,**
feeding, *Hydrellia valida*, USA, Florida, Oyster Bay 3621.
host plants, new species, *Calamomyia alterniflorae*, North America 3204.
salt marshes, recolonization, Arthropoda, USA, Florida Coast 5264.
- Spatal distribution,**
aggregation, *Achmoschus esculentus* host plants, *Anarsia biguttula* 4529.
aggregation, dispersion, *Thrips tabaci* 4420.
aggregation, *Mylabris pustulata* 4418.
atmospheric conditions, pest control, *Choristoneura fumiferana*, Canada, New Brunswick 705.
burrowing behavior, streams, larvae, *Progomphus obscurus*, *Gomphomus externus* 7023.
burrows, *Citellus leucurus* sugaris, *Neopysylla bidentatiformis*, China, People's Rep. 2895.
crop fields, Carabidae, Staphylinidae, Sweden, Uppsala 4543.
crop fields, *Diamphra longicornis*, Zea mays, USA, Iowa 6118.
crop fields, sampling methodology, *Pseudaletia unipuncta*, USA, Maryland 6113.
developmental stages, cannibalism, ponds, *Notonecta lunata*, *Notonecta undulata* 7017.
developmental stages, effects on pest control, *Bathyporeia thalassina* 581.
dispersal, colonies, Formicidae, Panama 4649.
dispersal, movements, sexual dimorphism, *Tetraopis tetraophthalmus*, *Tetraopis femoratus* 6816.
effects on pheromone traps efficacy, *Trypetodendron* 9302.
effects on population density estimation, *Graphognathus leucomela* 606.
eggs, *Arachis hypogaea*, *Elaenophorus lignosellus* 1139.
flight, *Drosophila nebulosa*, *Drosophila polymorpha*, *Drosophila latifasciaeformis* 8289.
food availability, effects on, *Coenagrion resolutum* 7808.
foraging behavior, intraspecific relationships, competition, colonies, *Pentaneurax badius* 2006.
habitat selection, bogs, sub-polar environments, Aedes, Canada, Quebec 6043.
host plants, *Aphis gossypii*, Central African Republic 2899.
host plants, sampling methodology, *Trichoplusia ni* 6107.
host-parasite interactions, *Quadriceps domineila*, *Quadriceps novaezeelandiae*.
Quadriceps oedemajor, *Charadrius obscurus*, *Thinnorhis novaezeelandiae*.
Anarhychnus frontalis, *Charadrius bicinctus*, New Zealand 512.
larvae, *Basilidomyces* cultivation, *Lycoriella agarici*, Australia, New South Wales 2966.
males, reproductive behavior, *Cystosoma saundersi* 2748.
mechanoreceptors, sensilla, thorax, leg, *Schistocerca gregaria* 910.
movements, aggregation behavior, sound production, males, *Neonoecephalus ensiger* 9361.
nesting behavior, intraspecific relationships, *Bembix puinosa* 5235.
neurosecretion cells, brain, ventral nerve cord, *Poecilochorus pictus* 5666.
parasitism, Hymenoptera, *Choristoneura occidentalis* 2812.
pests, agricultural practices effects on, *Oryza sativa* crop fields, *Orseolia oryzae*, *Scirpophaga incertulas* 6947.
pests, crop fields, *Brassica oleracea*, *Myzus persicae*, *Brevicoryne brassicae*, USA, California 4608.
pests, host plants, *Brevicoryne brassicae*, *Myzus persicae*, USA, California, Orange Co. 8358.
pests, host plants, *Helianthus annuus*, *Smicronyx fulvus* 6091.
pests, host plants, *Helianthus annuus*, *Smicronyx fulvus* 9309.
- Spatial distribution, (continued)**
pests, host plants, microclimate, population levels, *Aonidiella aurantii*, Greece, Crete 1256.
photoreceptors, rhodomeres, eye, *Musca domestica* 4968.
population density, mathematical models 3625.
population dynamics, mathematical models, Insecta 5239.
population levels, sampling methodology, *Hypera postica*, *Sitona hispidulus*, *Hypera punctata* 5626.
predators, orchards, predator-prey interactions, *Psylla pyri*, *Paononychus ulmi* 6211.
prey, predator-prey interactions, predatory behavior, *Physoseiulus persimilis*, *Amblyseius degenerans* 4356.
prey, predatory behavior, *Physoseiulus persimilis*, *Amblyseius degenerans*, 4350.
pupae, eggs, trees, *Colaradia pandora*, USA, Arizona 6035.
pupae, *Thanasimus dubius*, *Pinus taeda*, *Pinus echinata* 2082.
seasonal variations, adults, forests, *Monochamus alternatus* 4428.
seasonal variations, females, Culicidae, South Africa, Orange Free State 5284.
social organization, singing sites, aggregation behavior, population density, males, *Amblycorypha parvipennis* 2286.
temporal variations, eggs, oviposition, *Gossypium*, *Heliothis armiger* 1154.
traps, mathematical models, pests detection, *Anthonomus grandis* 2242.
urban environments, houses, *Blattella germanica*, USA, Virginia 3645.
vertical migrations, diel activity, host plants, *Acyrtosiphon gossypii* 6717.
- Spatial variations,**
territory, foraging behavior, *Myrmecocystus mimicus* 1999.
- Specialization,**
food preferences, food composition, flowers, saccharides, *Apis mellifera* 1998.
wings venation, comparative studies, Coleoptera 73.
- Speciation,**
association, *Ficus*, *Lissoccephala*, *Drosophila* 5964.
biogeography, phylogeny, *Idrisia nyctelius* 7881.
chromosomes inversion role, *Drosophila repleta* 8638.
coevolution, host plants, Cruciferae, *Anthocharis cardamines* 8348.
food sources, niche pattern, sympatric populations, *Drosophila*, Australia 5496.
habitat preferences, geographical distribution, *Synspondonites* 1563.
morphometry, leg bristles, *Drosophila silvestris*, Hawaii 6294.
population genetics, electrophoresis, *Anopheles hyrcanus* 1565.
reproductive isolation, evolution, male selection, *Drosophila melanogaster* 3929.
sympatric populations, behavior effects on, *Drosophila heteroneura*, *Drosophila silvestris* 1562.
sympatric populations, population genetics, *Anopheles farauti*, Australia 1556.
sympatry, host plants food selection, geographical variations, *Apidae* 1544.
- Species,**
check lists, *Coniapteryx* 2468.
check lists, taxonomic revision, *Hilaira* 7153.
identification, comparison, morphology, genitalia, *Apotomis semifasciana*, *Apotomis infida* 82.
identification, electrophoresis, morphology, *Xestia* 68.
identification, enzymes, *Simulium*, West Africa 2568.
identification keys, *Dicranocentrus*, Nepal, India 6387.
identification keys, *Mynymischa*, *Pseudopolygna* 6441.
identification, keys, *Tyrrhelia* 2495.
identification, methodology, Coleoptera 1696.
isolation, pheromones, biochemical characteristics, *Tetramorium impurum*, *Tetramorium caespitum* 3348.
keys, taxonomy, morphology, Geometridae, Canada 5654.
nomenclature, Taxonomy, Lycenidae 2463.
symbiosis, man, composition, Calliphoridae, Sarcophagidae 9259.
synonymy, taxonomic revision, *Phrynus*, America 2388.
taxonomic revision, keys, Phaenognatha, Australia 2402.
taxonomic revision, *Platygastridae*, Finland 7894.
- Species composition,**
abundance, activity patterns, *Simulium*, West Africa 3630.
abundance, *Bombus*, Poland, Pulawy 9476.
abundance, carrion, attractancy, *Staphylinidae* 5928.
abundance, crop fields, Carabidae, USA, Michigan 3772.
abundance, habitat, Araneidae, Czechoslovakia 5223.
abundance, habitat, Formicidae, India, Bisthenhant 5257.
abundance, habitat, Lepidoptera, USA, Texas, Barton Creek Canyon 7915.
abundance, Lepidoptera, Norfolk I. 4461.
abundance, Noctuidae, USA, Michigan, Douglas L. Region 2364.
abundance, Orthoptera, USA, Nevada 3155.
abundance, paddy fields, Arthropoda 5261.
abundance, seasonal variations, Lepidoptera, New Caledonia 4441.
abundance, soil, *Camellia sinensis* crop fields, Arthropoda 5428.
abundance, surveys, Coleoptera, Malaysia 3950.
abundance, surveys, Diptera, British Isles 6309.
abundance, surveys, Isoptera, Botswana 3672.
agricultural land, Carabidae, Belgium 9324.
Apidae, Malta 7891.
association, comes, *Insecta*, *Picea abies*, Poland 9201.
association, *Ficus*, *Lissoccephala*, *Drosophila* 5964.
association, forest floor leaf litter, *Collembola*, Mexico 2167.
association, grasslands, *Auchenorrhyncha*, German Dem. Rep., Leutra Valley 7584.
association, *Insecta*, *Arachnida*, *Zygodiphys* simplex, Namibia, Namib Desert 9160.
association, plant communities, *Costus*, *Formicidae*, Panama 8344.
attraction, *Helicoverpa*, *Arctidae*, *Ctenuchidae*, *Donax*, Kenya 5962.
benthos, Chrononidae, Sweden, Latnjaur L. 7020.
benthos, lakes, Chrononidae, New Zealand 7817.
benthos, streams, predators population decline effects on, *Salvelinus fontinalis*, Insecta 8613.
biogeography, montane environments, Lepidoptera, USA, Nevada, Spring Range 7914.
bluetongue virus isolation, *Culicoides*, Zimbabwe, Mukwazi Valley 9228.
bogs, Lepidoptera, Switzerland 6874.
breeding, Culicidae, USSR, Baikal 9220.
Bryopsida association, Coleoptera, British Isles, Scotland, Lurgie L. 5508.
catalogs, Coleoptera, France, Pyrenees 9456.
cavernicolous species, Geneva Museum, Diptera, Europe 5440.
check lists, *Auchenorrhyncha*, Belgium 9482.
check lists, Carabidae, *Cicindela*, Hungary, Bekes 8683.
check lists, *Cicindela*, Carabidae, Europe 9463.
check lists, Coleoptera, France, Pyrenees Mts., Spain, Pyrenees Mts. 7075.
check lists, *Drosophilidae*, Australia 8705.
check lists, *Ectoninae*, Mexico 6325.
check lists, Hymenoptera, British Isles, Isle of Man 6308.
check lists, Lepidoptera, Hungary, Budapest 8677.

Species composition, (continued)

- check lists, Lepidoptera, Spain 7081
 check lists, Lepidoptera, Spain, Huesca 7079
 check lists, Macrolepidoptera, Hungary, S. Transdanubia 8681
 check lists, Noctuidae, German Dem. Rep. 7072
 check lists, Odonata, France, Serignan 7074
 check lists, Opinae, Microgasterinae, Hungary 8687
 check lists, Platygastridae, Finland 7894
 check lists, reviews, Ectoninae, Mexico 9500
 check lists, Staphylinidae, Switzerland 7099
 check lists, Symphyta, Europe, Carpathian Basin 8682
 check lists, Symphyta, Switzerland 8680
 check lists, Tipulidae, Iberia peninsula 9469
 check lists, 30 species, Odonata, India, Uttar Pradesh, Pithoragarh District 8689
 Coleoptera, fauna, crop fields, Avenia, Finland 2220
 collections, Natural History Museum of Geneva, Mantispinae, Platymantispinae, Europe, Africa, South America, Malaysia 7883
 community structure, Bombus, Europe, North 6830
 community structure, habitat, Odonata, USA, Ohio, Grand R. 3854
 community structure, Malus, orchards, Coccinellidae 9190
 crop fields, weeds, Lygus, USA, Arizona 4604
 development, fungi association, Phoridae, British Isles 9107
 distribution, habitat, Saltonia, British Isles 6305
 distribution, surveys, Insecta, India 7908
 Eboria, Latithorax, Rhacothorax, Thyphochrestus, USSR, Siberia 7106
 ecological distribution, bark, Araneae, Europe 9177
 ecological distribution, pests, Scolytidae, Switzerland, South America 7722
 emergence, abundance, Empididae, Dolichopodidae, Germany, Fed Rep 3865
 entomofauna, surveys, grasslands, Austria 8689
 environmental surveys, forests, fires, Carabidae 6840
 environmental surveys, freshwater environments, Coleoptera, Hemiptera, British Isles, Norfolk Breckland 6234
 feeding, succession, diel, grasses, Formicidae, Turkey 6744
 flight activity, Diptera, USSR, Donetsk 9195
 flight activity, keys, Catocala, USA, South Dakota 7917
 forests, Branchycera, Cyclorhapha, Czechoslovakia 7101
 forests, ornamental plants, Thysanoptera, Israel 9479
 galls, Rudbeckia laciniata, Asphondylia helianthoglobulus 6020
 geographical distribution, Coleoptera, USSR 9460
 geographical distribution, Trochophilidae, Australia, Torres Strait 3953
 geographical distribution, Geometridae, Italy 7116
 geographical distribution, habitat, Orthoptera, Scandinavia 6318
 geographical distribution, Lepidoptera, Austria, Tyrol 7068
 geographical distribution, new records, Sciariidae, USSR 6396
 geographical distribution, Symphyta, Canada, Alberta, George L. 7818
 habitat, abundance, Lepidoptera, British Isles, England, Staffordshire 7887
 habitat, colonization, trees, drilled holes, Insecta 2284
 habitat, life cycle, Lepidoptera, USA, Nevada, Clark County 5145
 habitat preference, Diplopoda, German Dem. Rep., Thuringia 7588
 Haemaphysa, USSR 9477
 hedgehogs, management effects on, Arthropoda, British Isles 7618
 herbivores, host plants, species-area relation, Typhlobyrrhene, British Isles 5965
 host plants, Insecta, Convolvulus arvensis, Egypt 6807
 identification, sex pheromone, Isotria fumacalis, Ostrinia nubilalis, China, People's Rep., Henan Province 3750
 infestation, weeds, Gossypium, Acacia, Egypt 6974
 inventories, Arachnida, Costa Rica 7124
 islands, Culicidae, USSR Coast 9489
 Lepidoptera, Kenya 7907
 Lepidoptera, USA, California, Trinity Alps 7122
 migrations, Syrphidae, Switzerland, Munt La Schera 6815
 new records, Lepidoptera, British Isles, England, Yorkshire 9450
 new records, Microlepidoptera, Sweden 7085
 new records, Trichoptera, USA, Ohio 3150
 occurrence, Calyptera, British Isles, England, West Bromwich, Sandwell Valley 9444
 occurrence, Carabidae, France, Cerdagne 9473
 occurrence, introduced species, indigenous species, Psocoptera, Hawaii 7888
 occurrence, Lepidoptera, British Isles, Scotland, Kirkcudbrightshire 9447
 occurrence, Lepidoptera, Yugoslavia, Slovenia 9455
 occurrence, Orthoptera, British Isles, Scotland 6307
 occurrence, seasonal variations, annual variations, Trichoptera, Corixidae, Finland 8673
 occurrence, summer, Lepidoptera, Finland 7896
 occurrence, Symphyta, Crete 6427
 paleoecology, environmental changes, vegetation, Coleoptera, USA, New York, Lockport 7127
 parasites, Arthropoda, Rattus norvegicus norvegicus, USSR, Kazakhstan 9144
 parasites, Chironomidae, Nycteriidae, Czechoslovakia 7903
 parasites, Coccidae, host plants, Lygosominae, Africa 5206
 parasites, eggs, Trichogramma, Heliothis, USA, Texas 4383
 parasites, infestation, Chalcididae, Sphaerococcus pruinosus 9138
 parasites, insect, Acarina, Chironomidae, Michigan 7550
 parasites, Mammalia, Gamasidae, Iran 7109
 parasites, Phantasia, Goniodis dispar, Menopon pallens, Cuculogaster heterographus, Cuculogaster heterogrammus, Goniodis colebrici, Spain, Cordoba 8045
 parasites, Phoenocentrus ruber, Spain 8336
 parasites, seasonal variations, Lepodae, Ixodidae, Siphonaptera, Spain, Ciudad Real 8333
 parasites, Sorex cinereus, Sorex longirostris, Oryctolagus cuniculus, Myriabidae 9149
 parasitoids, Aphididae, Aphelinidae, Yemen, Arab Rep. 7902
 parasitoids, biological control, pest outbreaks, Zeiraphera diniana, Switzerland 7460
 parasitoids, larvae, Plutella maculipennis 9139
 pest control, damage, Isotria, India 5369
 pest outbreaks, Choristoneura occidentalis, Dorycteria renicelluloides, Zeiraphera hesperiana, Nematocampa filamentaria, Griseola radicans, Acleris glovera, USA, Idaho 5889
 pest outbreaks, Teleogryllus mitratus, Modicogryllus, Velarifictorus, Gryllopsis, India, Meghalaya 7694
 pests, crop fields, Acari, Senegal 9285
 pests, Manihot esculenta crop fields, Insecta, Acari, USA, Florida 4555
 pests, Saccharum officinale crop fields, Elateridae, Brazil, Sao Paulo 6098

Species composition, (continued)

- pests, soil, Insecta, India, Dhawad 5366
 pests, stored products, Pyralidae, Gelechiidae, Greece 7663
 pollinators, Helianthus annuus, Hymenoptera, USA, Texas, Lower Rio Grande Valley 9155
 ponds, wastewater treatment, Culicidae, USA, Florida, Indian River Co. 6045
 population decline, Microlepidoptera, British Isles, England, Sussex, Abbot's Wood 9219
 population dynamics, crop fields, Araneae, Opiliones, German Dem. Rep., Leipzig 4571
 population dynamics, water chemistry, Aedes 9376
 population levels, nests, Mammalia, Colombia 570
 predators, larvae, Diaprepes abbreviatus 4433
 predators, webs, Coccinellidae, Chrysopidae 6852
 prey, webs, Dictyna, Egypt, Arab Rep. 480
 rare species, Xylophagidae, Empididae, Czechoslovakia 7901
 records, Coleoptera, Finland 7897
 records, zoogeography, Heteroptera, Auchenorrhyncha, Norway 7898
 sampling, attractants traps, Neuroptera 1686
 seasonal variations, Carabidae, New Zealand, Banks Peninsula 6868
 seasonal variations, crop fields, Heliothis, USA, Mississippi 3012
 seasonal variations, Culicidae, Zimbabwe 1997
 seasonal variations, Halcinae, Austria, Innsbruck 6817
 seasonal variations, lakes, reservoirs, Chironomidae, USA, Florida 8609
 seasonal variations, Rhopalocera, Spain, Doñana Biological Reserve 6865
 seasonal variations, Sphecidae, Sweden 7087
 seasonal variations, streams, Trichoptera, USA, Florida 7018
 sewage effluents, dam effects on, Plecoptera, Canada, Alberta, Bow R. 8608
 soil fauna, agricultural ecosystems, Insecta, Egypt 7011
 soil fauna, Cereulomidae, Asia 8599
 soil fauna, Oribatidae, Japan 8600
 streams, hydrology, Hydropsychidae 9373
 streams, pollution effects, temephos, Insecta 7021
 sub-alpine environments, Rhopalocera, USSR, Peter the Great Mts. 7088
 surveys, Coccidae, Puerto Rico 3951
 surveys, Culicidae, Yugoslavia 3939
 surveys, geographical distribution, Homoptera, Czechoslovakia 3213
 surveys, historical account, Mutillidae, Africa 949
 surveys, host plants, Insecta, Trifolium alexandrinum, Egypt 6811
 surveys, Isotria, Italy, Abruzzo 7105
 surveys, Lepidoptera, Greece 6319
 surveys, Lepidoptera, Greece Coast 6316
 surveys, Macrolepidoptera, Yugoslavia 3936
 surveys, Myrmecidae, Formicidae, Mongolia, People's Rep. 8678
 surveys, Psocoptera, Yugoslavia 3938
 surveys, Rhynchophila, Hungary 9447
 surveys, Saltonia, British Isles 6301
 surveys, Staphylinidae, Mongolia, People's Rep. 3934
 surveys, weeds, Insecta, Egypt 6957
 symbiosis, Formicidae nests, Diplopoda 8382
 Tabanidae, Paraguay 7125
 Tabanidae, USSR, Amur 9462
 taxonomic morphology, Trichoptera, Australia, Southwest 7244
 temperature effects, emergence, Chironomidae, USA, Mississippi 750
 tests, sampling methodology, Insecta 6842
 Uremivladium tepenianum galls, Acacia host plants, Lepidoptera 7557
 weeds, host plants, Lygus, USA, Washington 8350
 xylophagous species, Monochamus, USSR, Siberia, Kamchatka Peninsula 7084
 zoogeography, alpine environments, Rhopalocera, USSR, Tajikistan 7071
 zoogeography, Coccidae, Switzerland 7900
 zooplankton, predation effects on, Chaoborus americanus 583
- Species diversity,**
 abundance, forests, Araneidae, Czechoslovakia 613
 abundance, seasonal variations, Noctuidae, Nigeria, Ife 8378
 abundance, shores, Ephyridae 622
 acacia patterns, ecological distribution, abundance, Diptera, Canada, Ontario, Salem Creek 3856
 association, grasslands, Auchenorrhyncha, German Dem. Rep., Leuna Valley 7584
 clear cutting effects on forests, Araneae, USA, Appalachian Mts. 6042
 coevolution, host plants, Apidae, North America 1564
 community composition, abundance, Arthropoda, Grenada 7583
 community composition, Diptera, Crozet I. 6828
 community structure, forests, Arthropoda, USA, Arizona 6854
 construction disturbance effects on, Arthropoda 1284
 entomofauna, surveys, grasslands, Austria 8689
 environmental conditions, bogs, Chironomidae, Eire 7806
 eutrophication, acidity, Chironomidae, New Zealand, Opal L. 1485
 evolution, pollination, Angiospermae, Insecta 5200
 geomyrmecology, population-environment relations, peninsular effect, Carabidae, Canada, Manitoba 5125
 habitat comparison, Formicidae, USA, South Carolina 1269
 hedgehogs, management effects on, Arthropoda, British Isles 7618
 herbivores, population-environment relations, guilds, leafminers, Insecta 3632
 larvae, competition, dispersion, Chironomidae, USA, Michigan, Hunt Creek 2289
 leaf litter, rainfall effects on, diurnal variations, Arthropoda 2883
 outbreaks, vegetation patterns, ranglands, Acrididae, USA, Arizona 6050
 pollution effects, streams, Trichoptera, Diptera, Plecoptera, Ephemeroptera, USA, Appalachian Mts. 7815
 pollution effects, water pollution, colonization, Hygrobatas fluvialis 1939
 pollution effects, water pollution, streams, Chironomidae, Belgium, Antwerp 7810
 population structure, Acari, orchards, Malus, USA, North Carolina 588
 seasonal variations, Culicidae, Zimbabwe 1997
 seasonal variations, Tribolium confusum, Sitophilus oryzae, Ephestia kuehniella, Rhyzopertha dominica, Japan 3640
 surveys, Ichneumoninae, Belgium 6324
 surveys, Papiionidae, USA, Illinois 1952
 Umbelliferae host plants abundance effects on, Agromyzidae 6789
- Species lists,**
 distribution, abundance, Issidae, Turkey 4737
 Ephyridae, Italy 1997
 Nemopteridae, Turkey 4738
- Species richness,**
 abundance, Culex theileri, Aedes juppi, Aedes durbanensis, South Africa, Orange Free State 5282
 agricultural practices effects on, Carabidae 8463
 association, plant communities, Costus, Formicidae, Panama 8344

Species richness, (continued)

biogeography, islands, Araneae, South Africa Coast 6848
community composition, herbivores, leaf litter, Insecta 9187
core species, satellite species, community structure, Bombidae 8377.
geographical distribution, latitude, Ichneumonidae 1966
host plants effects on, Lepidoptera, Finland 9162
macrophytes, freshwater environments, species composition, Coleoptera, Hemiptera, British Isles, Norfolk Breckland 6234
pests, *Camellia sinensis* crop fields, Arthropoda 4574
pollinators, water pollution, streams, Chironomidae, Belgium, Antwerp 7810
seasonal variations, herbivores, larvae, Macrolepidoptera, Finland 4327.

Species-area relation,
herbivores, host plants, species composition, Typhlocybinae, British Isles 5965.
mathematical models, Cicadellidae 6841

Specificity,
chemical properties, aminopeptidase, larvae, *Attagenus megatoma* 187.

Specimens
cleaning methodology, Lepidoptera 63.

Spectrophotometry,
retinal-binding protein characterization, retina, *Apis mellifera* 8919

Spectroscopy,
chromosomes movements, ultraviolet radiation effects on, Spermatocytes, *Nephotoma ferruginea* 4683.

Spectroscopy (photoelectron),
phosphorus localization, golgi apparatus, fat body, Insecta 8937

Specialist
digestive tract, enzymatic activity, chitinase, symbionts 926
pH, digestive tract, hydrogen ions 1747

Speleognathopsis galli,
parasites, new records, geographical distribution, Brazil 6334

Sphenophorus parvulus,
sampling methods, eggs, larvae, adults 8867

Sphenophorus lucidulus,
temperature receptors, antennal sensilla 4979.

Sperchla intricata,
sex pheromone, attractants, pheromone traps 1933.

Sperchion clupeifer annulatus,
new species, taxonomy, morphology, USSR 7131.

Sperchion laurenticus,
new species, taxonomy, morphology, USSR 7131

Sperchion levanidovae,
new species, taxonomy, morphology, USSR 7131.

Sperchion novitskii,
new species, taxonomy, morphology, USSR 7131.

Sperchion prosperus,
new species, taxonomy, morphology, USSR 7131.

Sperchion questor,
new species, taxonomy, morphology, USSR 7131.

Sperchion setiger,
host-parasite interactions, streams, *Simulium ornatum*, *Simulium equatum*, *Simulium angustipes*, British Isles, England 8313.

Sperchion similis,
new species, taxonomy, morphology, USSR 7131

Sperchion terminalis,
new species, taxonomy, morphology, USSR 7131

Sperm,
displacement, bursa copulatrix, mating behavior, males, *Leses vigilax* 8248
use, copulation, females, *Drosophila pseudoobscura* 397

Sperm storage,
mating behavior, *Prolinophya marginata* 8258

Spermatheca,
histology, *Gesonula punctifrons* 9034

Spermatids,
histology, cyst cells, spermatogenesis, *Myogryllus* 5065

Spermatocytes,
Bombix mori, synaptonemal complex attachment sites chromosomes 9406
Y chromosome, trimethylphosphate effects on, *Drosophila hydei* 2429.
chromosomes, Deltoccephalinae 3087.
chromosomes, movements, U.V. radiation effects on, *Nephotoma ferruginea* 4681.
chromosomes movements, spectroscopy, *Nephotoma ferruginea* 4683
meiosis, nucleoproteins, chromosomes fluorescence, Lepidoptera 6262
mutation, suppressors, oocytes, chromosomes, *Drosophila ananassae* 3098.
protein composition, Y chromosome mutants, *Drosophila hydei* 2333

Spermatogenesis,
chromosomes duplication, *Carausius morosus* 6266
deficient mutant, *Drosophila melanogaster* 3903.
Dermacentor albipictus, timing 1885.
development, α radiation effects on, *Dacus cucurbitae* 2705
diapause, temperature effects, adults, *Gastrophysa arcuocyanea* 1856
ecdysone effects on, diapause, *Laspesyesia pomonella* 5831.
electrodense material, nucleus, *Melipona* 5097.
endocrine function, Insecta 3508.
heterochromatin homology, meiosis segregation, autosomes, *Drosophila melanogaster* 7848.
juvenile hormones effects on, diapause, *Eurygaster integriceps* 6646
kinetics, *Dermacentor variabilis* 2725.
linoleic acid effects on, diets, *Acheta domestica* 1121.
mutation, X radiation, *Drosophila melanogaster* 3100.
protein composition, Y chromosome mutants, *Drosophila hydei* 2333.
reproduction, accessory gland role, *Stomoxys calcitrans* 8241
spermatids, histology, cyst cells, *Myogryllus* 5065.
spermiogenesis, eupyrene, apyrene, *Calpodus ethiops* 9064.
testes development, *Calpodus ethiops* 9065.
testes development, cell cycle, *Dermacentor variabilis* 2719.
testes development, *Papilio xuthus* 4272.
trimethylphosphate effects on, Y chromosome, *Drosophila hydei* 2429.

Spermatopis,
chromosomes, Deltoccephalinae 3087.

Spermatophores,
chemical composition, proteins, maturation, *Glossina morsitans* 354.
deposition, *Pelodyllia malabarica*, food availability, females, water content, effects on 1875.
nutritive value, selection pressure, comparison, *Heliconius charitonius*, *Dryas julia* 773.
occurrence, geographical distribution, *Baculum extrudentum*, *Phasmoda* 5805
ultrastructure, *Glossina morsitans* 325.

Spermatozoa,

chromosomes markers, neutron radiation, X radiation effects on, *Drosophila melanogaster* 2312.
copulation, reproductive behavior, *Nezara viridula* 398.
insemination, breeding, *Apis mellifera* 8553.
locomotion, ultrastructure, *Aedes notoscriptus* 105.
maturation, accessory gland, *Ixodidae* 4282.
radiation damage, chromosomes, DNA repair, oocytes, mutants, *Drosophila melanogaster* 6261.
sex chromosomes breakage, storage females, triethylencelamine, ethylmethanesulfonate effects on, *Drosophila melanogaster* 1515.
spermiogenesis, eupyrene, apyrene, *Calpodus ethiops* 9064.
storage, eggs fertilization, *Baculum* 6654.
storage, females, *Enallagma cyathigerum* 8210.
storage, overwintering, mating, *Scaptomyza aetulus*, USA, Florida 5148.
survival, amino acids effects on, *Apis mellifera* 4277.
toximal MP-8, mutagenicity testing, *Drosophila melanogaster* 300.
transfer, chemosterilization, pest control, *Anthonomus grandis* 2225.
translocations, neurons, X radiation effects on, *Drosophila melanogaster* 2331.

Spermophagus calystegiae,
morphology, identification 8884.

Spermophagus caricis,
new species, taxonomy, morphology, Turkey 8777.

Spermophagus sericeus,
morphology, identification 8884.

Spermophilus lateralis,
infection, Colorado tick fever virus, disease transmission vectors, *Dermacentor andersoni* 3655.

Spermophilus mexicanus,
nontarget organisms, pest control, *Cochliomyia hominivorax*, USA, Southwest 2206.

Speryeria diana,
gynandromorphs, morphology, development 8654.

Sphaeraspis,
ultrastructure, glands, waxes, integument, cytology 243.

Sphaeridium,
bioaccumulation, lead, USA, Kansas 608.

Sphaerobothria,
taxonomy, morphology, Costa Rica 3173.

Sphaerobothria,
new species, taxonomy, morphology, Tahiti, Fiji, Philippines 7139.

Sphaerolaelaps holothroides,
new records, geographical distribution, USSR 9474.

Sphaerolecanium prunastri,
parasites, species composition, infestation, *Chalcidoidea* 9138.

Sphaerophoria lowii,
new records, geographical distribution, Ireland 4706.

Sphagoeme bicolor,
taxonomic revision, synonymy, *Sphagoeme sahbergi*, Brazil 6381.

Sphagoeme parensis,
new species, taxonomy, morphology, Brazil 6381.

Sphagoeme sahbergi,
taxonomic revision, synonymy, *Sphagoeme bicolor*, Brazil 6381.

Sphagoeme suturalis,
new species, taxonomy, morphology, Brazil 6381.

Sphecidae,
abundance, species composition, new records, Sweden 7087.
fauna, Austria, Scheibbs Region 4729.
phylogeny 7882.
predatory behavior, circadian rhythms 9128.
taxonomy, synonymy, Palearctic Region 8828.

Sphecodes cristatus,
new records, geographical distribution, islands, Baltic Sea 3942.

Sphecomyia valida,
flight, range extension, geographical distribution, new records, USA, Mississippi, USA, Arizona, USA, North Dakota 2366.

Sphenophorus callosus,
infestation, crop fields, *Zea mays* 2249
pest control, insecticides efficacy, *Zea mays* 2250.

Sphenophorus parvulus,
host plants susceptibility, cultivars, *Poa pratensis* 5327.
pests, cultivars susceptibility, *Poa pratensis* 537.

Spheg ichneumoneus,
intraspecific relationships, parental behavior, agonistic behavior, females 9215.

Spingidae,
flight activity, energetics 118.

Sphinx mimos,
taxonomy, morphology 4047.

Sphinx purpuralis,
taxonomy, synonymy, *Zygaena purpuralis* 4044.

Spodrin,
new records, new species, Nepal 808.

Spodros abdu,
life history, mating behavior, sex pheromone 6714

Spodros rufipes,
life history, mating behavior, sex pheromone 6714.

Spikes,
flight muscle, orientation effects on timing, *Acrididae* 150.

Spilarcia imparilis,
larvae, colonies, predation mortality, Japan 2165.
summer diapause, photoperiod, hibernation 7439

Spilopyllus cuniculi,
myxomatosis vectors, pest control, *Oryctolagus cuniculus*, Australia, New South Wales, Urua 7627.
parasites, feral populations, *Felis* 511.

Spilosoma menthastri,
morphology, difference, comparison, *Hyphantria cunea*, *Spilosoma urticae* 89

Spilosoma urticae,
morphology, difference, comparison, *Hyphantria cunea*, *Spilosoma menthastri* 89

Spilotethus pandurus,
systematics, nomenclature 7196

Spilotragodes,
new genera, taxonomy, morphology, Africa 7938

Spine neurons,
femur, mechanoreceptors, *Periplaneta americana*, 122

Spines,
morphology, abdomen, pupae, *Thyridopteryx ephemeraeformis* 8877.

- Spinning**, silk, larval heads capsules, Chironomidae 104.
 webs, insecticides effects on, *Tetranychus cinnabarinus* 1048.
 webs, oviposition, hyperparasitism, *Signiphora coqueletii* 7543.
- Spinothrips**, taxonomy, geographical distribution, speciation 1563.
- Spiturnax**, morphology, ultrastructure 7279.
- Spiturnax globosus**, parasites, new records, *Myotis lucifugus*, Canada, Alberta 5192.
- Spiturnax tibetensis**, new species, taxonomy, morphology, China, People's Rep. 2386.
- Spiracles**, respiration, gas exchange, aerophylls, *Tipula paludosa*, *Pedicia parvicellula* 4145.
 ventilation, neurons, coordination, thorax, *Locusta migratoria* 5665.
- Spirochaetes**, incidence, disease transmission, Ixodidae, USSR, Tajikistan, Isfahan 9242.
- Spiroplasma citri**, vectors, development, distribution, *Scaphytopius nitridus* 8220.
- Spiroplasma**, pathogens, effects on larvae growth, *Galleria mellonella* 2648.
- Spiroplasma citri**, enzyme-linked immunosorbent assay, detection, *Insecta* 6597.
- Spirulina platensis**, proteins, artificial diets, rearing, *Bombix mori* 3239.
- Spissistilus festinus**, abundance, crop fields, weed control effect on, *Glycine max* 2997.
 eggs, parasites, distribution, host plants 8384.
- Splicing**, RNA, nucleotide sequence, secondary structure, *Drosophila melanogaster* 1499.
- Spodoptera**, baculovirus infection, activation 2619.
 nuclear polyhedrosis virus strains, isolation, characterization 9000.
- Spodoptera eridania**, aging, pigments, fluorescence, lysosomes 4240.
 development, host plants effects on, nutrient availability, *Brassica nigra* 5960.
 food consumption, food preferences, resistance, herbivores, *Zea mays* 4602.
 growth, host plants, pest resistance, genotypes, *Zea mays* 8518.
 interspecific relationships, attractancy, *Schinia mite* 5120.
 NADPH-cytochrome reductase, cross-reactivity, antibodies, *Insecta* 1768.
 NADPH-cytochrome reductase, role, digestive tract 1758.
 nutrition, physiology, diets effects on, food plants 5677.
 olfactory stimuli, parasites, *Eucelatoria* 4321.
- Spodoptera exempta**, electroantennograms, sensilla trichodea, synthetic sex pheromone, Z-9-tetradecen-1-yl acetate, Z-9,E-12-tetradecadien-1-yl acetate 7344.
 larvae, food organisms, *Cocos nucifera* 478.
 larvae, host plants antifedants, Warburgia 2842.
 larvae mortality, pathology, nuclear polyhedrosis virus 271.
 larvae, phase variations, survival, seasonal variations 577.
 mortality, nuclear polyhedrosis virus, larvae 268.
 pest outbreaks, seasonal variations, environmental factors, Africa 579.
 population dynamics, flight activity, larvae mortality factors 580.
 rearing, population dynamics, survival, development, Kenya 1310.
- Spodoptera exigua**, biological control, infection, susceptibility, sol, Neoplectana carpocapsae 6160.
 biological control, pathology, *Bacillus thuringiensis* 997.
 compound eyes, light sensitivity, ultraviolet radiation, light traps 911.
 food organisms, predator-prey interactions, *Nabis americoferus* 3927.
 granulosis virus, infection, characterization 1028.
 granulosis virus, pathogenicity 5752.
 hemolymph biochemistry, environmental effects, stress, ontogeny 3371.
 hemolymph, chemical composition, water stress, temperature effects 4173.
 infection, pathology, nuclear polyhedrosis virus 1823.
 pest control, synthetic sex pheromone, efficacy 2201.
 pests, feeding site preferences, *Apium graveolens* 8550.
 population density estimation, pheromone traps, efficacy 2238.
 pupae, susceptibility, parasitism, *Neoplectana carpocapsae* 287.
 virulence, pathogens, *Autographa californica* nuclear polyhedrosis virus 3417.
- Spodoptera frugiperda**, aldol epoxidase, microsomes, induction, host plants 5712.
 biological control methodology, sex pheromone, air permeation technique 9346.
 cell culture, infection, baculovirus 2650.
 cell culture, methodology 878.
 cell culture, *Oryctes baculovirus* replication 880.
 cell lines, baculovirus persistent infection 1728.
 chemical control, insecticides, methomyl 5416.
 compound eyes, light sensitivity, ultraviolet radiation, light traps 911.
 damage, yield, *Zea mays* 3751.
 development, fecundity, host plants, artificial diets 6169.
 feeding, oviposition, longevity, foliage age, *Archis hypogaea*, effects on 382.
 food preferences, feeding behavior, *Eileusine indica* 3566.
 granulosis virus, pathogenicity 5752.
 host plants, Cynodon dactylon, temperature, effects on, growth, development 556.
 host plants pest resistance, larvae growth, *Eremocha ophiuroides* 8539.
 infection, nuclear polyhedrosis virus, granulosis virus, seasonal variations, USA, Louisiana 5751.
 infection, pathology, immune response, *Nomuraea rileyi* 1806.
 infection susceptibility, nuclear polyhedrosis virus 5746.
 instaration, host plants genotypes, *Sorghum bicolor* 6127.
 larvae, growth, inhibition, insecticides 3445.
 mass rearing, eggs, separation techniques 2491.
 pathogens incidence, *Sorghum vulgare* crop fields, USA, Georgia 3407.
 pest control, suppression, mating, oviposition, sex pheromone 4624.
 pest resistance, host plants, effects on population levels, *Zea mays* 5395.
 pests, antibiotics resistance, *Eremocha ophiuroides* 4406.
 pests, sampling, pheromone traps, Canada, Ontario 8555.
 phenology, population dynamics, temperature effects on development 6031.
 population dynamics, Guadeloupe 6870.
 rearing, harvesting methodology automation, pupae 8024.
 susceptibility, pathogens 9011.
 temperature effects on toxicity, insecticides 8206.
 toxicity, exotoxins, *Bacillus thuringiensis* 5051.
 toxicology, susceptibility, insecticides, host plants 3010.
- Spodoptera littoralis**, biological control, pathogens, *Bacillus thuringiensis* 1011.
 biological control, pathology, *Bacillus thuringiensis* 997.
 carnage, diets, effects on development, growth 8231.
 disease transmission, nuclear polyhedrosis virus 9279.
 eggs, developmental stages, biochemical composition, fatty acids 1082.
 food consumption, food conversion, gallic acid, coumarin effects on 7345.
 growth, feeding, food plants, Ghana 2849.
 insecticides, growth regulators effects on survival, sterility 1837.
 larvae, host plants antifedants, Warburgia 2842.
 mating delay, life span, fecundity 5822.
 mortality, biological control, pathogens, *Bacillus thuringiensis* 2643.
 mortality, insecticides, eldren, methomyl, synergists, piperonyl butoxide, MGK 264, DEF 9023.
 nuclear polyhedrosis virus infection effects on lipids, hemolymph 3411.
 parasitoids, surveys, pest control, Cyprus 2810.
 pathogens, nuclear polyhedrosis virus, DNA restriction endonuclease mapping 5758.
 pest control, pheromone traps, socio-economic aspects, Egypt, Arab Rep 8490.
 pesticides, toxicity, synergism 7400.
 pests, parasites, surveys, Egypt 6975.
 reproductive organs secretions, color, age effects, mating 2707.
 sex pheromone, chemical composition, attractancy, components 6575.
 sex pheromone, olfactory perception, electroantennograms 1738.
 susceptibility, nuclear polyhedrosis virus 2635.
 temperature, effects on development, fecundity 7460.
 toxicity, insecticides, eggs, larvae, adults 6615.
 toxicity, leaves, *Persea americana* 7787.
- Spodoptera litura**, activity patterns, diel variations, India 9100.
 chemical communication, sex pheromone, (Z)-9-alkenols effects on inhibition 1163.
 head capsules, growth, morphology, food plants 7468.
 hormones, melanization, coloration 3360.
 larvae, bioassays, antifedants, chlorodane, diterpenes 2654.
 nuclear polyhedrosis virus effects on food consumption, molting 275.
 pest control, insecticides 5355.
 pest control, insecticides, nuclear polyhedrosis virus, *Brassica oleracea capitata* 8439.
 pests, *Azadirachta indica* effects on parasitism, *Telenomus remus* 6214.
 pests, natural enemies, surveys, India 6926.
 pests, new records, predators, Armoee, India, Andhra Pradesh 1439.
 population growth, pests, host plants varieties, *Archis hypogaea* 6913.
 sex pheromone components, effects on males flight 1160.
 susceptibility, pathogenicity, *Bacillus thuringiensis* 7378.
 toxicity, DDT powders 7421.
 trapping, pheromone traps, seasonal variations, Japan 2229.
- Spodoptera mauritia**, antifedants, fungicides 8975.
 chemical control, toxicity, diflubenzuron 3034.
 diflubenzuron effects on development, larvae 5084.
- Spodoptera ornithogalli**, larvae development, parasitoids effects on, *Chelonus insularis* 4379.
- Spodoptera praefica**, pest control, biological control, natural enemies, USA, California 4626.
 pests, evaluation, damage, crops, *Lens culinaris* 8483.
- Spodoptera pruri perda**, flight activity, temperature effects 1943.
- Spondias mangifera**, hosts, parasites, new species, *Tegolophus spondialis*, India, West Bengal 3969.
- Spongilia lacustris**, food organisms, feeding behavior, life cycle, *Ceralecia nigronervosa*, Norway 5429.
- Spore crystals**, bioassays, toxicity, *Bacillus thuringiensis*, *Ostrinia nubilalis* 5052.
- Spores**, *Bacillus* larvae, distribution, colonies, *Apis mellifera* 1016.
 bioassays, toxicity, *Bacillus thuringiensis*, *Ostrinia nubilalis* 5052.
 bioassays, toxicity, *Bacillus thuringiensis*, *Ostrinia nubilalis* 5780.
 disinfection, parasites, *Nosema apis*, *Apis mellifera* 6610.
 infection, methodology, *Entomophaga grylli*, *Melanoplus bivittatus*, *Melanoplus differentialis*, *Melanoplus femurabrator* 4089.
 pathogens, biological control, *Bacillus thuringiensis israelensis*, streams 6101.
- Sporogony**, ultrastructure, parasites, salivary gland, *Theileria parva*, *Rhipicephalus appendiculatus* 9007.
- Sporozoa**, life history, pathogens, *Orthoptera*, *Coleoptera* 5025.
- Sporozites**, parasites development, *Babesia ovis*, *Rhipicephalus bursa* 5024.
- Sporulation**, pathogens, infection, *Acyrtophis kondoi* 2646.
- Spotted fevers**, *Rickettsia sutsugamushi*, transmission, infection, guinea-pigs, *Orthodorus moubata* 9233.
- Spraying**, pesticide applications, livestock, *Sus scrofa*, *Mallotapha*, *Anoplophora*, *Psooroptidae* 8429.
- Sprays**, citrus spray oil, toxicity, insecticides, methidathion, *Aonidella aurantii* 5048.
- Spring**, temperature effects, patterns, flight, emergence, *Ostrinia nubilalis* 2102.
- Spuleria flavicapot**, new records, geographical distribution, Sweden 4722.
- Sri Lanka**, dispersal, age, seasonal variations, capture-recapture studies, *Anopheles culicifacies* 5979.
 genetic variance, resting behavior, host preferences, blood meals, *Anopheles culicifacies* 9430.
 new genera, taxonomy, morphology, *Neaonaxosia salviae* 7132.
 new records, geographical distribution, *Contoptrygidae* 4901.
 new species, new genera, *Calimnetopoides albomaculatus* 3182.
 new species, parasites, *Tropilaelaps koenigium*, *Apis dorsata* 3973.
 new species, *Prochlorus lankus*, *Thoracocircus decaus*, *Paederus besucheti*, *Paederus loebli*, *Paederus mussardi* 4809.
 new species, *Seromyia heveli*, *Seromyia maculipennis*, *Seromyia punctata* 7964.
 new species, taxonomy, morphology, *Culicoides schramme*, *Culicoides krombeini* 2613.
 new species, taxonomy, morphology, *Leucospis lankana* 7216.

Sri Lanka, (continued)

- new species, taxonomy, morphology, *Noctuidae* taprobane 7962.
 new species, taxonomy, morphology, 6 species, *Phalantias* 4808.
 nests, pests, chemical control, *Helopeltis antonii* 677.
 pest control, crop protection, economics, *Gossypium*, *Heliothis armigera*, *Earias vitella*, *Pectinophora gossypiella* 6110.
 pests, life cycle, diets, *Helopeltis antonii* 4532.
 taxonomy, morphology, *Symphya* 5598.
- Stability**,
 alcohol dehydrogenase, measuring techniques, *Drosophila* 182.
 allozymes, population genetics, *Drosophila melanogaster* 3129.
 chromosomes, replication, mutation, *Drosophila melanogaster* 7037.
 community composition, forests, Carabidae, France 6824.
 microtubules, dissection methodology, *Insecta* 106.
 population dynamics, colonies, mathematical models, *Myrmica lunicata* Jacobson 8380.
 predators, predator-prey interactions, prey population density, *Notonecta hoffmanni* 8646.
- Stachytarpheta mutabilis**,
 antifeedants, purification, ipomamide 8967.
- Stactobia ericae**,
 new species, *Sardinia* 4066.
- Staining**,
 eggs, survival, *Magistera* 2702.
 heterochromatin, *Arcyptera fusca* 3085.
 methodology, eggs, *Limnoria trilinea* 4083.
 methodology, nerves, 2-deoxy-D-glucose, *Insecta* 8013.
 methodology, Y chromosome, lampbrush, *Drosophila hydei* 3894.
 neurosecretion cells, eye, histology, *Hersilia savignyi* Lucas 2527.
- Stalk rot**,
 effects on, *Ostrinia nubilalis* infestation effects on, *Zea mays* 8496.
- Stamens**,
 recognition, flower-guides, conditioning, *Bombidae* 7501.
- Standardization**,
 pests catching methods, comparison, *Phyllocnistis citrella* 7251.
- Standing crop**,
 nectar, effects on feeding behavior, *Delphinium nelsoni*, *Bombus appositus* 495.
- Stauda**,
 defoliation, effects on community structure, *Orgyia pseudotsugata*, *Coniferales*, USA, Idaho 3601.
 leaf litter, hibernation, *Ips typographus*, *Picea* 9044.
Pseudotsuga menziesii, population levels, measuring techniques, pests, *Choristoneura occidentalis* 8478.
- Staphilinidae**,
 surveys, species composition, Mongolia, People's Rep. 3934.
- Staphylinidae**,
 check lists, species composition, Switzerland 7099.
 collections, Dep. Taxon. Insects, Inst. Plant Protection Res., German Dem. Rep., Eberswalde 6337.
 defense secretions, chemical composition, taxonomy, New Zealand 247.
 morphology, teratology 1719.
 new records, geographical distribution, German Dem. Rep., Potsdam, Rietzer See 4711.
 new records, geographical distribution, Maltese Is. 4746.
 new species, Iran, Jordan, Afghanistan, Yemen 3187.
 new species, morphology, geographical distribution, New Guinea 2398.
 nontarget organisms, insecticides, pirimiphos-methyl, effects on population levels, Czechoslovakia, Jense Hory Mts. 7571.
 pest control, isofenphos 9320.
 phylogeny, functional morphology, anatomy, evolution, elytra 7288.
 predators, pest control, *Delia brassicae* 2210.
 seasonal variations, occurrence, spatial distribution, crop fields, Sweden, Uppsala 4543.
 succession, community composition, USSR, Ukraine, Carpathian Mts. 6867.
 taxonomic revision, morphology, keys 5558.
 taxonomy, morphology 3181.
- Staphylinides**,
 taxonomy, morphology, Galapagos Islands 1611.
 taxonomy, morphology, new genera, new species, Asia 4812.
- Staphylinus ater**,
 predation, new records, intertidal environment, Nematoda, British Isles, Scotland, Ythan Estuary 8362.
- Staphylococcus**,
 pathogens, infection, *Boophilus decoloratus* 5030.
- Staphylococcus aureus**,
 association, toxic shock syndrome, man, stings, Hymenoptera 8416.
 pathogens, infection, effects on hemolymph, *Anthonomus grandis* 5711.
- Staphylococcus epidermidis**,
 otitis media, association, *Sporoxes cuculici*, rabbits 5285.
- Starvation**,
 cold hardiness, *Nanorchestes antarcticus*, *Alaskozetes antarcticus*, *Stereotypeus villousus*, *Gamasellus racovitzae*, Antarctica, Signy I. 6579.
 detection, thorax glucose levels, *Apis mellifera* 194.
 effects on, digestive tract, fate, blood meals, sugar, *Toxorhynchites rutilis* 922.
 effects on oogenesis, hormones, females, *Labidura riparia* 966.
 effects on oogenesis, juvenile hormones mimics, *Labidura riparia* 1116.
 effects on pupation, feeding, larvae, *Calliphora vicina* 7455.
 juvenile hormones biosynthesis, corpora allata, neurophysiology, *Leptinotarsa decemlineata* 8106.
 molting, juvenile hormones, enzymatic activity, *Manduca sexta* 3500.
 proctode II, effects on corpora allata activity, *Dysdercus cingulatus* 9052.
 survival, comparison, *Mallos gregalis*, *Dityna* 1212.
 vitellogenesis, farnesol effects on, *Labidura riparia* 5079.
- Statistical analysis**,
 mathematical models, pest control, environment management 1585.
 pest outbreaks, climate, *Agrotis segetum*, Denmark 5412.
 pest outbreaks, climate effects on, *Dendroctonus frontalis* 2961.
 population density estimation, environmental impact, *Insecta* 4755.
 population levels, *Philodromus cespitum* 9176.
 sampling methodology, pest control, crop fields, *Tetranychus urticae*, *Mentha piperita* 8505.
 toxicity testing, insecticides, body weight effects on lethal dose, *Choristoneura occidentalis* 8207.
 variance, male sterility, competitiveness, *Insecta* 2480.
- Statistical genetics**,
 breeding, selection methodology, mathematical models, *Apis mellifera* 8620.
- Stator**,
 morphology, keys, larvae 4932.
- Stator chihuahua**,
 morphology, keys, larvae 4932.
 oviposition, bionomics 5102.
- Stator generalis**,
 morphology, keys, larvae 4932.
 oviposition, bionomics 5102.
 predation, seeds, geographical variations, *Enterolobium cyclocarpum*, Central America 5973.
 temperature effects on respiration, fecundity, development 8224.
- Stator limbatus**,
 morphology, keys, larvae 4932.
 temperature effects on respiration, fecundity, development 8224.
- Stator mexicanus**,
 oviposition, bionomics 5102.
- Stator pruinus**,
 morphology, keys, larvae 4932.
 temperature effects on respiration, fecundity, development 8224.
- Stator pygidialis**,
 morphology, keys, larvae 4932.
 oviposition, bionomics 5102.
- Stator sordidus**,
 morphology, keys, larvae 4932.
 oviposition, bionomics 5102.
 temperature effects on respiration, fecundity, development 8224.
- Stator vachelliae**,
 morphology, keys, larvae 4932.
 oviposition, bionomics 5102.
- Status**,
 collections, identification, taxonomy, *Insecta*, Malawi 3174.
 economics, identification, taxonomy, *Insecta*, Africa 3176.
 identification, taxonomy, *Insecta*, Africa 3178.
 pest control, crops, pheromones 1453.
 taxonomy, *Chorinaeus* 1648.
 taxonomy, coloration, morphology, *Catocala* 7227.
 taxonomy, identification, *Insecta*, Egypt, Arab. Rep. 3177.
 taxonomy, keys, *Trioza* 2438.
 taxonomy, larvae morphology, *Catocala pretiosa* 7231.
 taxonomy, morphology, *Dendroctonus solarii* 7211.
 taxonomy, morphology, *Papilio machaon* rathjensi 7229.
 taxonomy, *Nomia foxi* 5601.
- Stenoderus scalaris**,
 chromosomes, deficient mutants, Spain 7034.
- Stegana**,
 taxonomic revision, new species, 8 species, *Pseudostegana*, Papua New Guinea, Philippines 3990.
- Stegana shirozai**,
 new records, India 784.
- Steganacarus**,
 new species, Greece 7142.
- Stegasia bosquedii**,
 parasites, new species, Invreia, USA, Texas 3221.
- Stegobium paniceum**,
 functional morphology, aedeagus 5808.
- Steinernema kraussel**,
 parasites, population dynamics, horizontal distribution, soil, *Cephalcia abietis* 9173.
- Stelidota geminata**,
 abundance, seasonal variations, crop fields 3826.
- Stelidota geminata**,
 predator-prey interactions, population dynamics, mathematical models, *Atheta coraria* 9204.
- Stemmatosteres primus**,
 parasites, new species, *Antonia graminis*, South Africa 2029.
- Stenachroa elongella**,
 new records, pest outbreaks, *Zea mays*, India, Meghalaya 7689.
- Stenacron**,
 taxonomy, morphology 3207.
- Stenacron interputatum**,
 phenology, nymphs, diets, habitat selection 3052.
- Stenalia iranica**,
 new species, taxonomy, morphology 6375.
- Stenocara gracilipes**,
 hydrocarbons, biochemical characteristics, taxonomy 6565.
- Stenochilus**,
 morphology, genitalia, Australasian Region 8052.
- Stenoductus chondromorphi**,
 parasites, digestive tract, life cycles, *Chondromorpha kelaarti* 4182.
- Stenodynerus**,
 taxonomic revision, morphology 8832.
- Stenognatha filitii**,
 new species, taxonomy, morphology, Antilles 5606.
- Stenolophus comma**,
 food preferences 4355.
- Stenomptirale**,
 morphology, keys, species, Israel 5650.
- Stenosema**,
 taxonomy, morphology 3207.
- Stenonema bednariki**,
 new species, morphology, taxonomy, USA, Kentucky 2432.
- Stenonema mexicana**,
 occurrence, taxonomy, Panama 3166.
- Stenonema pulchellum**,
 phenology, nymphs, diets, habitat selection, streams 3052.
- Stenopogon cinchonensis**,
 new species, taxonomy, morphology, India 7179.
- Stenopogon manii**,
 new species, taxonomy, morphology, India 7179.
- Stenopogon mysorensis**,
 new species, taxonomy, morphology, India 7179.
- Stenotabanus**,
 autogeny, first record, Brazil 1132.

- Stenotaphrum secundatum**, host plants, pest resistance, varieties, hybrids, *Blissus insularis* 8556.
- Stenus josephi**, new species, taxonomy, morphology, USSR, Kazakhstan, Hungary 7952.
- Stephanitis pyrioides**, feeding behavior, host plants 2800.
- Stereocorys villosus**, cold hardiness, acclimation, starvation, Antarctica, Signy I 6579.
- Stereotyped behavior**, activity patterns, molting, *Rhodnius prolixus* 4340.
- courtship, stimulation, calling behavior, males, *Ligyrocorys diffusus* 1904.
- homing behavior, *Caatylipis* 2751.
- oviposition, substrate preferences, *Acheta domestica* 8255.
- visual communication, conspecifics, *Reti culitermes* 413.
- Sterile-release**, competition, sexual reproduction, males, *Anthonomus grandis* 8541.
- control programs, orchards, *Cydia pomonella*, Canada, British Columbia 3815.
- Glossina morsitans morsitans*, role, transmission, *Trypanosoma* 5277.
- pest control, mating behavior frequency, *Hyalemya antiqua* 8249.
- pest control, population dynamics, models 5341.
- pest control, sterilized organisms mating, *Ephestia elutella* 8232.
- pests, eradication, population ecology, *Dacus cucurbitae* 6087.
- pheromones, attractancy, *Lymantria dispar* 5872.
- population dynamics, males, competition, mathematical models 6077.
- Sterility**, antibiotics effects on, *Heliothis subflexa* × *Heliothis virescens* 3501.
- chemosterilization, pest control, *Anthonomus grandis* 2225.
- diflubenzuron, radiation effects on, *Anthonomus grandis* 1123.
- factors, cytoplasm, genetic control, resistance, *Drosophila melanogaster* 3121.
- growth regulators effects on, BAY SIR 8514, adults, *Musca domestica* 8237.
- hybridization, incisors chromosomes, *Drosophila melanogaster* 2326.
- hybrids, gonads atrophy, *Drosophila simulans* 5067.
- hybrids, mass rearing methodology, *Heliothis* 3243.
- insecticides, growth regulators effects on, *Spodoptera littoralis* 1837.
- mutants, characterization, RNA biosynthesis, ovary, *Drosophila melanogaster* 1530.
- mutants, tumorigenesis, *Drosophila melanogaster* 3093.
- ovipositing, hybridization, *Boophilus annulatus* × *Boophilus microplus* 3112.
- oogenesis, preovulatory effects on, progeny, *Glossina morsitans morsitans* 5093.
- progeny, prococene effect on, *Glossina morsitans morsitans* 2698.
- queens, social organization, *Leptothorax provancheri* 2285.
- sex isolation, population genetics, *Drosophila melanogaster* 6281.
- thiopepa effects on, *Sarcophaga ruficornis* 356.
- trichlorfon, juvenile hormones analogs effects on, *Blattella germanica*, 1829.
- Sterilization**, chemical control, pest control, larvae, *Lepidoptera* 3709.
- chemical control, thiopepa, pupae, *Culicoides nubeculosus* 1355.
- chemosterilants, radiation, *Nephitis serripoda* 7458.
- competition, *Anthonomus grandis* 9053.
- irradiation, strontium 90, control, survival, sex differences, *Glossina palpalis* 1470.
- methodology, blood meals, *Glossina morsitans morsitans* 8845.
- pest control, diets, radiation, *Anthonomus grandis* 3486.
- α radiation, effects on mating behavior, fertility, females, *Dacus cucurbitae* 7457.
- γ radiation, honey contamination, *Streptococcus pluron* 8475.
- γ radiation, pest control, *Caryedon serratus* 7449.
- Sterilized organisms**, mating, competition, *Ephestia elutella* 8232.
- pheromones attractancy, *Lymantria dispar* 5872.
- rearing, dispersal, *Ceratitis capitata* 6136.
- Sternal gland**, anatomy, *Mischocyttarus flavitarsis*, *Mischocyttarus drewseni*, *Mischocyttarus mexicanus* 5717.
- epidermis cells, histology, *Mischocyttarus flavitarsis*, *Mischocyttarus drewseni*, *Mischocyttarus mexicanus* 5015.
- functional morphology, comparison, *Polistes fuscatus*, *Polistes canadensis* 1801.
- morphology, trail pheromone, chemical communication, *Onychomymex* 8977.
- role, chemical communication, *Anaesthetus simoni* 2758.
- secretions, chemical communication, *Anaesthetus simoni* 2762.
- tail pheromone secretion, size, instars, *Trinervitermes bebbianus* 3374.
- Stenotoma uzbeki**, new species, taxonomy, morphology, Spain 7931.
- Steroids**, biosynthesis, reproductive systems, *Periplaneta americana* 6655.
- hormones, role, molting, *Lepidoptera* 2691.
- host plants, antifedants, *Epilachna varivestis* 2077.
- molting hormones, bioaccumulation, ovary, *Bombyx mori* 210.
- Steroids**, biochemical analysis, pest resistance, susceptibility, *Insecta*, *Glycine max* 535.
- brain, body, biochemical analysis, identification 5690.
- development, *Lygaeus mulsanti* 7479.
- diets, effects on development, reproduction, *Diatraea grandiosella* 3490.
- effects on reproduction, development, *Glossina morsitans* 355.
- 10-hydroxydecanoic acid, nutrition, larvae, *Apis mellifera* 8080.
- nutrient requirements, synthetic diets, apiculture, *Apis mellifera* 1407.
- Stethobius**, taxonomy, morphology, phylogeny 3185.
- Stethobius latifolia**, taxonomy, morphology, phylogeny 3185.
- Stethorus koreanus**, new species, taxonomy, Korea 785.
- Stethorus picipes**, predators, control programs, pests, *Tetranychus urticae* 3776.
- Stichoplasma**, taxonomy, morphology, Costa Rica 3173.
- Stictia carolina**, predators, food preferences, prey 5165.
- Stictia maculata**, nesting behavior, nest building, nest provisioning, defensive behavior 6666.
- Stictelia fairchildi**, new species, taxonomy, morphology, USA, Florida 8827.
- Stictelia gillipii**, new species, taxonomy, morphology, USA, Arizona, Mexico 8827.
- Stictelia villegasi**, new species, taxonomy, morphology, USA, California 8827.
- Stigmella pyripora**, new species, taxonomy, morphology, Cyprus 4892.
- Stigmella svenssoni**, new records, geographical distribution, Denmark 5515.
- Stilbopterya**, taxonomy, morphology 3226.
- Stilbomezia ensistyla**, new species, taxonomy, morphology, India 4000.
- Stimulants**, environmental effects, Malpighian tubules, secretion, *Locusta* 2613.
- oviposition, efficacy, assays, *Aedes triseriatus* 1897.
- oviposition, host plants, efficacy, *Hyalemya antiqua* 515.
- oviposition, larvae, *Aedes togoi* 399.
- oviposition, *Lycopersicon esculentum* host plants, *Keiferia lycopersicella* 4402.
- Stimulation**, farnesol acid, juvenile hormones biosynthesis, corpora allata, *Diploptera punctata* 208.
- feeding behavior, sucrose effects on, *Schistocerca gregaria* 493.
- oviposition, microorganisms effects on, *Hyalemya antiqua* 1136.
- Stimuli**, feeding, plant extracts, phenolics, *Morus*, *Bombyx mori* 7529.
- Stings**, anaphylaxis, immunotherapy, man, *Insecta* 7635.
- association, toxic shock syndrome, man, *Hymenoptera*, *Staphylococcus aureus* 8416.
- bites, medical importance, treatment, *Latreutes inactans*, *Loxonotus reclusa*, *Chiracanthus* 627.
- bites, treatment, medical importance, *Scorpiones*, *Reduviidae* 629.
- defective mutant, *Apis mellifera* 768.
- edema, heart, case reports, *Buthus* 9256.
- glands, poison apparatus, anatomy, comparison, *Hymenoptera* 5014.
- Hymenoptera*, *Araucaria*, *Scorpionidae* 664.
- hypersensitivity, immune response (cell-mediated), man, *Hymenoptera* 3654.
- hypersensitivity, man, *Apidae*, *Australia* 9266.
- hypersensitivity, man, *Hymenoptera* 1324.
- medical importance, economic importance, man, *Solenopsis* 6893.
- medical importance, man, *Arthropoda*, USA, Georgia, P. Stewart 6886.
- odynophagia, dysphagia, man, venom, *Vespa* 8177.
- toxicology, effects on man, *Scorpiones*, Switzerland 658.
- treatment, hypersensitization, man, *Hymenoptera* 2931.
- venom, immunoglobulin E, man, *Hymenoptera* 3699.
- venom, toxicity, sensitivity, man, reviews, *Apocidea* 6616.
- Stobaea tricarinata**, immature stages, morphology 6491.
- Stocking rates**, effects on culture egg production, *Anopheles albanus* 387.
- Stomoxys subscissella**, nuclear polyhedrosis virus infection, symptoms 290.
- Stomoxys calcitrans**, accessory gland, reproduction, ablation, hatchability, fertility, females 1853.
- accessory gland, reproduction, role, spermatogenesis 8241.
- amino acids, nervous system, characterization 1283.
- blood meals, growth, tollitoxins 9051.
- blood meals, midgut, enzyme activity 5676.
- breeding sites, substrate specificity, hav, larvae, pupae 9071.
- capture-recapture studies, marking, population density, models, *Stomoxys calcitrans* 590.
- cattle pests, abundance, British Isles, Scotland 736.
- chemical control, chemosterilization methodology, thiopepa 5353.
- diflubenzuron effects on DNA biosynthesis 1512.
- disease transmission, anaplasmosis, cattle 2169.
- excretory duct, accessory gland, histology 5063.
- hemolysin, purification, hosts, effects on parasites development, *Muscidifurax raptor*, *Spalangia* 2116.
- hosts, parasitoids, reproduction, *Spalangia cameroni* 5181.
- larvae, overwintering, silage, control programs 2190.
- livestock pests, hemophagy, life cycle, pest control 3743.
- metabolic behavior, feeding behavior, thermoregulation behavior 1176.
- metabolism, energy resources, developmental stages 4159.
- molting development, larvae benzamide effects on 1128.
- nervous system, amino acids 4125.
- parasites, reproduction, survival, *Spalangia cameroni* 9141.
- pest control, Germany, Fed. Rep. 612.
- phenothrin, dose-response effects 1401.
- population dynamics, environmental effects 2148.
- population dynamics, environmental effects 7606.
- predators, abundance, domestic animals excretory products, *Arthropoda*, Uganda 2896.
- pupae, DNA biosynthesis inhibition, diflubenzuron 1043.
- pupae, parasites, sampling methods, *Hymenoptera* 8857.
- toxicity, endrin analogs 1072.
- Stomoxys calcitrans**, ovary development, blood meals effects on 3497.
- Stomoxys nigra**, population levels estimation, sampling methodology, agricultural ecosystems 46.
- Storage**, biological control pathogens, *Verticillium lecanii*, *Insecta* 2217.
- collection, survival, *Jalisco spinosus* 730.
- females, spermatozoa, methylenemelanine, ethylmethanesulfonate effects on sex chromosomes breakage, *Drosophila melanogaster* 1515.
- freezing, nitrogen, semen, artificial insemination, viability, *Apis mellifera* 1877.
- honey, effects on nectar harvesting, *Apis mellifera* 8593.
- insecticides, malathion, DDT, lindane, carbaryl, dichlorvos, efficacy, *Callosobruchus maculatus*, *Callosobruchus chinensis* 7686.
- maintenance, queens, *Apis mellifera* 8547.
- pollen, apiculture, methodology, *Apis mellifera* 1406.
- proteins, bioaccumulation, development, developmental stages, *Bombyx mori* 3498.
- proteins, characterization, immunological aspects, *Dacus oleae* 2579.
- proteins, fat body, metamorphosis, *Sarcophaga peregrina* 3318.
- pupae, temperature effects, adults longevity, flight activity, *Cochliomyia hominivorax* 1868.
- queens, methodology, *Apis mellifera* 5339.
- semenal fluid, females, enzymatic activity, esterase, *Drosophila melanogaster* 2716.
- sex pheromone, glands, lipids, *Dermaecentor variabilis*, *Dermaecentor andersoni*

Storage, (continued)

- 5908
 spermatozoa, eggs fertilization, *Baculum* 6654
 spermatozoa, overwintering, mating, *Scaptomyza aetulus*, USA, Florida 5148
 temperature effects, fecundity, survival, *Amblyomma americanum* 1129
 temperature effects, spermatogenesis, *Gastrophysa atrocyanea* 1856
- Storage proteins,**
 identification, purification, *Galleria mellonella* 6567
- Stored products,**
 containers, pest resistance, *Insecta* 9337
 food quality, pests effects on, *Acarus siro* 2202
 grains, pest control, *Insecta*, Malawi 0968
 infestation, pest control, *Triticum*, *Sitophilus oryzae* 7662
 infestation, pests, *Hordeum*, *Rhyzopertha dominica* 2257
 occurrence, pheromone traps, *Pyralidae*, Czechoslovakia 9294
 peanuts, pests, pesticide resistance, insecticides, *Plodia interpunctella*,
Ephestia cautella, *Tribolium castaneum*, USA, Southeast 4223
 pest control, air flow, *Glyciphagus destructor*, *Acarus siro*, *Tyrophagus*
putrescentiae, *Oryzaephilus surinamensis*, *Tribolium castaneum*, *Sitophilus*
granarius 6092
 pest control, antifedants, repellents, *Rhyzopertha dominica*, *Tribolium castaneum*
 7729
 pest control, carbon dioxide, *Insecta* 1403
 pest control, chemical control, insecticides, *Insecta* 2190
 pest control, growth regulators, *Coleoptera* 3787
 pest control, heat treatments, *Rhyzopertha dominica*, *Sitophilus oryzae* 2251
 pest control, *Insecta* 2984
 pest control, insecticides, *Callosobruchus maculatus*, *Callosobruchus chinensis*
 7669
 pest control, insecticides persistence, *Callosobruchus chinensis* 7770
 pest control, insecticides, *Sitophilus granarius*, *Tribolium confusum*, *Rhyzopertha*
dominica 7768
 pest control, juvenile hormones analogs, *Insecta* 2258
 pest control, juvenile hormones analogs, *Tribolium castaneum* 2239
 pest control, methodology, microwave radiation, *Rhyzopertha dominica*, *Sitophilus*
oryzae 3793
 pest control, microwave radiation, *Insecta* 1784
 pest control, pinuphosph methyl, efficacy, *Insecta* 676
 pest control, predators, *Ephestia cautella*, *Blattisocius tarsalis* 2955
 pest control, *Pyralidae*, *Gelechiidae* Greece 7663
 pest control, temperature, *Rhyzopertha dominica*, *Sitophilus oryzae* 6928
 pests, abundance, distribution, seasonal variations, *Ephestia kuehniella*, British
 Isles, Scotland 2264
 pests, atmospheric conditions effects on, *Acarina* 1395
 pests, biological control, *Bacillus thuringiensis*, *Plodia interpunctella*,
Ephestia cautella 8474
 pests, chemical control, fumigants, *Acar* 1045
 pests, chemical control, growth regulators, CGA-28772 9331
 pests, chemical control, insecticides 8545
 pests, chemical control, phosphine resistance, *Tribolium castaneum* 1046
 pests, community composition, *Manihot esculenta*, Malaysia 5386
 pests, community composition, seasonal variations, *Tribolium confusum*, *Sitophilus*
oryzae, *Ephestia kuehniella*, *Rhyzopertha dominica*, Japan 3640
 pests, detection, traps, *Insecta* 3783
 pests, development, life cycle, *Callosobruchus maculatus* 5314
 pests, development, life cycle, *Wey-roy* drink mix, *Insecta* 9323
 pests, effects on Zea mays chemical content, *Prostephanus truncatus*, *Sitophilus*
zeamais, *Sitotroga cerealella* 3767
 pests, feeding, mortality, temperature, *Sitophilus granarius* 6112
 pests, fumigation, methyl bromide, phosphine, *Tribolium castaneum* 6627
 pests, growth regulators, CGA-28772, *Plodia interpunctella*, *Ephestia cautella*,
Sitotroga cerealella, *Oryzaephilus surinamensis*, *Tribolium confusum* 6103
 pests, growth regulators, residual effects, *Rhyzopertha dominica*, *Sitophilus*
oryzae 8572
 pests, infestation, environmental effects, *Glyciphagus destructor*, *Acarus siro*,
Triticum 7693
 pests, life history, *Sitophilus granarius*, *Sitophilus oryzae*, *Sitophilus zeamais*
 9152
 pests, pesticide resistance, genetic factors, strains, *Bruchidae* 1068
 pests, pesticide resistance, *Plodia interpunctella*, *Ephestia cautella*, *Tribolium*
castaneum 8205
 pests, pesticide resistance, Switzerland 6921
 pests, phosphine toxicity, *Insecta* 1050
 pests, phosphine toxicity, *Insecta* 1051
 pests, population dynamics, *Sitophilus oryzae*, *Trogoderma granarium*, *Tribolium*
castaneum, *Triticum* 5330
 pests, population growth, grain, *Sitophilus zeamais*, *Tribolium castaneum* 5344
 pests, repellents, comparative studies, *Insecta* 711
 pests, reproduction, *Sitophilus oryzae*, *Tribolium castaneum*, *Oryza sativa* 7679
 pests, surveys, *Insecta*, Saudi Arabia 3738
 pests, susceptibility, fumigants, food plants effects on, *Callosobruchus*
chinensis 7672
 pests, toxicity, DDT, lindane, *Insecta* 7409
 pests, *Triticum*, *Acarus siro*, *Acarus farris*, *Aeroglyphus robustus*, *Lepidoglyphus*
destructor, *Tyrophagus putrescentiae* 8513
 pests, vertical distribution, factors affecting, *Oryzaephilus surinamensis*,
Sitophilus oryzae, *Rhyzopertha dominica* 1445
 protection, chemical control, decamethrin, *Zea mays*, *Sitophilus zeamais*,
Sitotroga cerealella 6192
 shipments, pest control, phosphine fumigation, *Insecta* 2241
 toxicity, pesticides (organophosphorus), pests, *Coleoptera* 7403
Triticum, temperature, humidity, effects on survival, fecundity, *Sitophilus*
oryzae 6977
- Storm water,**
 drainage systems, breeding sites, *Culicidae*, USA, New Jersey 2918
- Strains,**
 body size, effects on, copulation, breeding success, *Musca domestica* 2747
 cold tolerance, overwintering, *Myzus persicae* 5893
 cross-breeding, sex chromosomes, genetic variance, *Drosophila melanogaster* 7029
 development, eggs, cytoplasmic inheritance, *Aedes polynesiensis* 1542
 disease transmission, beet western yellows virus, *Myzus persicae*, USA, Washington
 6139
 enzymatic activity, γ -glutamyltransferase, pesticide resistance, *Musca*
domestica 947
 geographical distribution, population genetics, gene localization, protein
 composition 2350

Strains, (continued)

- geographical distribution, temperature effects, growth, development, *Simulium*
decorum, USA 2793
 honey production, foraging behavior, comparison, *Apis mellifera* 4595
 host plants, comparative studies, feeding behavior, *Nephotettix cinctipes* 2856
 host preferences, host plants, *Apanteles flavipes* 2979
 microsomes, enzymatic activity, cytochrome levels, comparison, *Tribolium*
castaneum 3326
 parasitoids, interbreeding, *Apanteles melanoscelus*, *Lymantiria dispar* 8324
 pest control, genetic control, cytoplasmic male sterility, translocation, *Culex*
quinquefasciatus 6387
 pesticide resistance, effects on development, fecundity, *Musca domestica* 8197
 pesticide resistance, insecticides, *Musca domestica* 4233
 pesticide resistance, lindane, *Dermestes maculatus*, British Isles 3115
 pesticide resistance, pesticides (organochlorine), electrophoresis, enzymes,
Anopheles stephensi 4216
 pesticide resistance, *Plutella xylostella* 3443
 pesticide resistance, selection, *Amblyseius fallacis* 5794
 pesticide resistance, stored products pests, genetic factors, *Bruchidae* 1068
 pheromones olfactory perception, effects on behavior, *Trogoderma granarium* 1157
 population genetics, genetic variance, enzymes, *Glossina morsitans morsitans*
 7876
 reproductive isolation, competition, population density, *Drosophila melanogaster*
 1545
 selection, bristles morphology, *Drosophila melanogaster* 1553
 selection, pesticide resistance, pyrethroids, physiology, *Musca domestica* 1055
 silk glands, weight, cocoons, *Bombyx mori* 6963
 susceptibility, insecticides 3441
- Strangalia,**
 new species, taxonomy, morphology, Central America 6385
- Strangaliella emoloi,**
 new species, Nepal 1609
- Strategy,**
 foraging behavior, webs, site location, *Araneidae*, *Linyphiidae* 5170
- Stratification,**
 interspecific relationships, sampling, cluster analysis, orchards, *Aphididae*
 6466
- Stratiomys longicornis,**
 occurrence, water salinity, Dead Sea 9375
- Strawberry crinkle virus,**
 transmission, *Chaetosiphon fragaefolii* 274
- Strawberry mild yellow edge virus,**
 transmission, *Chaetosiphon fragaefolii* 274
- Streams,**
 benthos, burrowing behavior, *Progomphus obscurus*, *Gomphomus externus* 7023
 benthos, species composition, predators population decline effects on, *Salvelinus*
fontinalis, *Insecta* 8613
 biogeography, *Insecta*, Australia, New Zealand 3952
 biological control, pathogens, spores, *Bacillus thuringiensis israelensis* 6101
 community composition, pollution effects, diflubenzuron, *Insecta* 7024
 community composition, pollution effects, diflubenzuron, toxicity testing,
Insecta 9370
 community structure, pollution effects, sewage effluents, *Insecta*, USA, Virginia
 7814
 ecological distribution, identification, morphology, *Oecetis disjuncta*, *Oecetis*
avara 8004
 emergence, diel variations, environmental effects, *Chironomidae*, Canada, Ontario
 6224
 energetics, allochthonous input, *Coleoptera*, *Diptera*, *Homoptera*, *Arachnida*,
Lepidoptera 8737
 flooding, substrate, environmental effects, abundance, *Limnocois insularis*,
Cryptoceros latus, Costa Rica 2294
 growth, productivity, life cycle, *Ephemeroptera* 7012
 habitat, feeding behavior, larvae, *Pycnospyche guttifer*, Canada, Quebec 6227
 habitat selection, *Stenacron punctipatum*, *Stenonema pulchellum* 3052
 host-parasite interactions, *Simulium ornatum*, *Simulium equum*, *Simulium*
angustipes, *Sperchion setiger*, British Isles, England 8313
 hydrology, species composition, *Hydropsychidae* 9373
 larvae, check lists, freshwater ecosystems, *Trichoptera*, Netherlands 1574
 larvae, pollution effects, *Insecta* 315
 life cycle, feeding, diapause, *Ephemera danica*, *Siphonurus aestivalis*, Sweden
 3055
 life history, bionomics, *Arctopsyche grandis*, USA, Idaho 5434
 life history, growth, *Philopotamus montanus*, British Isles, Lake District 2794
 new records, geographical distribution, *Taeniopteryx*, USA, Colorado 3165
 pollution effects, acid rain, occurrence, *Siphonurus lacustris*, *Heptagenia*
lateralis, British Isles, Scotland 8607
 pollution effects, insecticides, abundance, ecosystem dynamics, organic matter,
Insecta 7820
 pollution effects, insecticides, *Insecta* 5437
 pollution effects, temephos, community composition, *Insecta* 7021
 pools habitat, coexistence, *Dytiscidae*, *Culicidae*, USA, Arizona, Dry Creek 9372
 secondary production, environmental factors, *Parapsyche cardis*, *Dipterona*
modesta, USA, Georgia 2291
 sedimentation, ash, bioaccumulation, *Hesperoperla pacifica*, *Rhyacophila*
acropedus, *Rhyacophila vao*, *Drumella doddii*, *Rhyacophila robusta* 6236
 species composition, distribution, seasonal variations, *Trichoptera*, USA, Florida
 7018
 water currents, functional morphology, laser doppler anemometry, benthos,
Ecdyonurus venosus 7026
 water pollution, community composition, *Chironomidae*, Belgium, Antwerp 7810
- Strength,**
 wax, combs, apiculture, *Apis mellifera* 5317
- Streptanthus,**
 host plants, flowers, feeding, *Pieridae*, USA, California 8340
- Streptococcus,**
 intestinal microflora, distribution, abundance, *Schistocerca gregaria* 2012
- Streptococcus pluton,**
 honey contamination, sterilization, α -radiation 8475
- Streptogonopus jerdoni,**
 mating behavior, copulation 5109
- Streptomycetes,**
 avermectins, toxicity testing, *Insecta*, *Acar* 4214
- Streptomycetes hygroscopicus,**
 milbemycins, toxicity, *Tetranychus urticae*, *Panonychus citri* 2662

- Streptomyces hygroscopicus aureolacrimosus**, antibiotics, mycelium, acaricides, pest control, *Tetranychus urticae*, *Panonychus citri* 5309.
- Streptomyces**, effects on pheromones biosynthesis, *Ips paraconfusus* 3352.
- Stress**, acetic acid, nutrient utilization, *Drosophila* 8075. environmental effects, hemolymph biochemistry, *Spodoptera exigua* 3371. environmental effects, population structure, castes, *Formica obscuripes* 1304. freezing, fruit trees, pest control, pesticide applications, *Insecta* 1427. heat shock, ADH genotype, effects on ethanol tolerance, *Drosophila melanogaster* 159. hosts, *Metrosideros collina* polymorph, *Platylabus bilineatus*, life history, ecology, oviposition, host selection, USA, Hawaii 1961.
- Stridulation**, auditory communication, *Xanthippus coralipes* 262. calling behavior, courtship, males, *Lagynocoris diffusus* 1904. courtship, mounting behavior, copulation, *Palmacoris nana* 4300. defense mechanisms, disturbance effects on, *Megaloblatta blaberoides* 4341. energy metabolism, oxygen consumption, *Anurogryllus arboreus*, *Oecanthus cerniculus*, *Oecanthus quadripunctatus* 5021. frequency, acoustic responses, neurons, cerci, song, *Gryllus campestris* 4972. mechanisms, sound production (biological), *Tesseraona javanica* 263. morphology, stridulatory apparatus, *Merope* 4112. pheromones, geographical distribution, new species, *Dacus opiae*, Australia 821. sound production, communication, acoustics, *Conixia* 8615. sound production, *Eupholidoptera chabrieri* epitoca 8273. sound production, morphology, workers, *Leptothorax muscorum* 1921.
- Stridulatory apparatus**, auditory communication, *Xanthippus coralipes* 262. morphology, bioacoustics, sound frequency, *Helicoida*, *Deinacrida* 5020. morphology, developmental stages, *Triatoma infestans* 70. morphology, *Merope* 4112.
- Strigiphilus lophostrix**, synonymy, taxonomy, *Strigiphilus transversifrons* 3225.
- Strigiphilus transversifrons**, synonymy, taxonomy, *Strigiphilus lophostrix* 3225.
- Strike**, man, *Parasarcophaga ruficornis*, Thailand 4499. mortality, *Wohlfahrtia opaca*, juveniles, *Anas clypeata*, *Anas discors*, Canada, Saskatchewan 5190. pathogens, oviposition, sheep 1333.
- Strongylophthalmyia ruficornis**, new species, taxonomy, morphology, USSR 6395.
- Strongylophthalmyia stackelbergi**, new species, morphology, USSR 27.
- Strenthium**, radiotopes, elimination, symbiotic effects on, *Gromphadithia portentosa*, *Gromphadithia schaeferi* 8108.
- Structural protein**, isolation, characterization, entomopoxvirus, *Amatsa moorei*, *Euxoa auxiliaris*, *Melanopus sanguineus* 4204.
- Structure**, alcohol dehydrogenase, evolution, *Drosophila* 3334. biochemical analysis, proteins, integrins, *Helicoida zea* 885. chromosomes, relationship position effects variegation, heat shock puffing, *Drosophila melanogaster* 7840. colonies, nest building, *Parischnogaster mellyi* 2278. cuticle, reviews, *Ixodidae*, *Argasidae*, *Nuttallitellidae* 5658. genes, polytene chromosomes, *Drosophila melanogaster* 3065. heterogeneity, subunits, hemocyanin, *Androctonus australis* 3320. midgut, a radiation effects on, *Dacus dorsalis* 7359. mounds, comparative studies, *Macrotermes subhyalinus*, *Macrotermes michaelseni* 747. nests, thermoregulatory behavior, *Trigona denotti* 2280. polytene chromosomes, salivary gland, *Chironomus plumosus* 7847. haRNA ribonucleoproteins, electron microscopy, *Drosophila melanogaster*, *Calliphora erythrocephala* 7819. sense organs, hearing, *Cystoma saundersi* 119. variation, genes, ribosomes, rRNA, *Drosophila melanogaster* 5448. webs, predatory behavior, aquatic environment, *Wendigardia* 1967. webs, stabilimenta, defense mechanisms, *Argiope aurantia*, *Argiope trifasciata* 1990.
- Structure-activity relationships**, insecticides toxicity, *Musca domestica*, *Phaedon cochleariae* 2661. juvenile hormones, analogs, *Panstrongylus megistus* 5000.
- Strychnos nux-vomica**, plant extracts, insecticides, toxicity, *Bagrada cruciferarum* 6625.
- Styrmionidia w-album**, population levels, rare species, British Isles 5998.
- Styries**, fauna, taxonomy, Noctuidae, Germany, Dem. Rep. 1573.
- Sturmia convergens**, food plants, site, parasitism, *Danaus plexippus* 2068.
- Sturmipolys inferens**, larvae, host preferences, reproduction, *Chilo infuscatellus*, *Chilo aureicollis*, *Acrona stenellus* 1216. temperature effects, development, fecundity, survival 2683.
- Sturmidoecus caliginosus**, synonymy, taxonomy, *Sturmidoecus incomptus* 3225.
- Sturmidoecus incomptus**, synonymy, taxonomy, *Sturmidoecus caliginosus* 3225.
- Stygomma spiferia**, defense secretions, chemical composition 986.
- Stylidia biarticulata**, new records, hosts, *Barbastella barbastellus* 7903.
- Stylopa europaei golovatchi**, new species, taxonomy, morphology, USSR 4070.
- Stylopa europaei usbekistanicus**, new species, taxonomy, morphology, USSR 4070.
- Stylopa bipunctata**, morphology, intraspecific variation 1725.
- Stylopa crawfordi**, parasitism, stylopization, *Adrena*, USA, Texas 6763.
- Sueda linearis**, host plants, feeding behavior, saline environments, *Clanoneurum americanum* 5904.
- Suaris piresi**, new species, taxonomy, morphology, Cape Verde Islands 4059.
- Suas genitalis**, morphology, comparison, *Leptoglossus cinctus*, *Leptoglossus fasciatus* 4938.
- Sub-alpine environments**, species composition, *Rhopalocera*, USSR, Peter the Great Mts. 7088.
- Sub-polar environments**, bogs, habitat selection, spatial distribution, *Aedes*, Canada, Quebec 6043.
- Subspecies**, morphology, *Aclens obtusana obtusana*, *Aclens obtusana fuscana*, Finland 7222. taxonomic revision, *Cicindela lunulata*, World 7983.
- Substrata**, flooding, streams, environmental effects, abundance, *Limnocoerus insularis*, *Cryphoceros latus*, Costa Rica 2294.
- Substrate preferences**, breeding, site location, *Chrysopilus*, *Puolna*, *Rhagio*, *Symphoromyia* 3534. burrowing behavior, streams, larvae, *Progomphus obscurus*, *Gomphomphus externus* 7023. color matching, visual stimuli, polymorphism, *Circotetix rabula rabula* 4318. ecological distribution, benthos, *Chironomidae*, Sweden, *Lamajure* L. 7020. ecological distribution, larvae, *Chironomidae*, Yugoslavia, Pek R. 566. egg laying, *Xylemus peltatus* 2701. enzyme polymorphism, loci, alleles, *Drosophila mojavensis* 5477. feeding, *Aphis fabae*, *Acyrtosiphon pisum* 5925. food preferences, foraging behavior, yeasts, *Drosophila mojavensis* 4342. habitat selection, fungi, colonial characteristics, *Acromyrmex landolti* 6221. habitat selection, nymphs, *Hexagenia bilineata* 3853. larvae, competition, dispersion, *Chironomidae*, USA, Michigan, Hunt Creek 2289. oviposition, *Aedes aegypti*, Thailand 5846. oviposition, *Cucumis sativus*, *Diaphania nitidalis*, *Diaphania hyalina* 5112. oviposition, egg production, *Tetrathrips pollenii* 6673. oviposition, host plants, *Aphidoletes aphidimyza* 6679. oviposition, host plants, *Cajanus cajan*, *Melanogromyza obtusa* 6674. oviposition, host plants, *Callosobruchus chinensis*, *Callosobruchus maculatus* 7495. oviposition, host plants, *Sorghum vulgare*, *Athengona soccata* 7483. oviposition, soil types, soil moisture, *Chrotogonus* 2734. oviposition, stereotyped behavior, *Acheta domestica* 8255. oviposition, visual stimuli, light, *Aedes vexans* 5077. oviposition, yeasts, *Drosophila* 9072.
- Substrate specificity**, alcohol dehydrogenase, *Drosophila melanogaster* 7315. breeding sites, bay, larvae, pupae, *Stomoxys calcitrans* 9071. cytochrome P-450, binding, microsomes, *Musca domestica* 6561. esterase, pesticide resistance, pesticides (organophosphorus), *Tetranychus kanzawai* 7407. oviposition, environmental effects, host plants, *Sinicae*, Australia 1896. oviposition, sexual reproduction, environmental effects, *Rhagoletis pomonella* 2684. traps, oviposition, eggs enumeration, methodology, *Aedes triseriatus* 860.
- Subulterites**, defense secretions chemical composition, phylogeny 1566.
- Subunit structure**, ribosomes, *Drosophila melanogaster* 9385.
- Succession**, community composition, association, *Heliconia*, *Insecta* 5951. community composition, carrion, *Insecta*, Costa Rica 5166. community composition, construction disturbance effects on, vegetation patterns, *Arthropoda* 1284. community composition, developmental stages, lakes, *Coleoptera*, Sweden 3857. community composition, fires, recovery, chaparral, *Insecta*, USA, California 5246. community composition, *Leccium scarabum* host plants, *Mycetophilidae* 4439. community composition, *Staphylinidae*, USSR, Ukraine, Carpathian Mts 6867. community structure, forests, *Arthropoda*, USA, Arizona 6854. feeding, diet variations, species composition, *Formicidae*, Turkey 6744. pest, pest control, growth, *Ovis sativus*, *Insecta*, India 781. reclaimed land, mine, plant communities, *Arthropoda* 6048. vegetation patterns, forests, community composition, *Araneae* 9180.
- Succinate dehydrogenase**, gene expression, labelling cells, development, *Drosophila* 757.
- Sucrose**, diets, nutrient sources, effects on locomotor activity, *Anthonomus grandis* 8276. effects on feeding behavior regulation, *Schistocerca gregaria* 493. hoarding behavior, *Apis mellifera*, *Apis mellifera adansonii* 8300.
- Sudan**, domestic animals, skin diseases, *Demodex folliculorum*, *Sarcoptes scabiei*, *Psoroptes cuniculi* 2923. infestation, treatment, *Sarcoptes scabiei*, *Ovis* 2924. man, hypersensitivity (immediate), allergens, *Cladotartarus lewisii* 1370. pest control, *Hibiscus cannabinus*, *Podargus punctulatus* 2852. pests, life history, control programs, *Athengona* 4562.
- Sugar**, chemoreceptors, taste perception, larvae, *Drosophila* 4141. diets, effects on oogenesis, *Culex pipiens pallens* 5819. diets, effects on supernumerary molting, *Manduca sexta* 1107. fate, digestive tract, *Toxorynchites rutilis* 922. plasma levels, correlation analysis, honey production, *Apis mellifera* 5325.
- Sugarcane mosaic virus**, disease transmission, *Cicadulina bipunctata* zae, Egypt, Arab Rep. 8471.
- Sugarcane streak virus**, disease transmission, *Cicadulina bipunctata* zae, Egypt, Arab Rep. 8471.
- Sugars**, gustatory stimuli, discrimination, *Lygus lineolaris* 5163. gustatory stimuli, food preferences, *Camponotus compressus* 8301. metabolism, food utilization, *Oxyrhachis tarandus*, *Hyalinipennis* 7321.
- Suidasia medanisii**, infestation, fishery products, moisture effects on 2948. infestation, fishery products, salts effects on 2949.
- Sukunahikosa poppi**, new species, morphology, taxonomy, India 3180.
- Sulawesi**, new species, taxonomy, morphology, *Baocericium* 5555. new species, taxonomy, morphology, *Brachylobopygia decora* 8811.

- Sulfanilic acid**, repellents, pest control, *Dysdercus koenigii* 7340.
- Sulfite dehydrogenase**, *Drosophila melanogaster*, characterization 3314.
- Sulfur**, resistance, inheritance, population genetics, *Metastasis occidentalis* 5493.
- sediments, lakes, environmental impact, burrowing organisms, *Hexagenia* 8601.
- Sulfur dioxide**, air pollution, effects on growth, development, *Epilachna varivestis* 2153.
- chemical control, population density, prunes, *Melanoplus sanguinipes* 2990.
- effects on pests susceptibility, host plants, *Phascolus vulgaris*, *Epilachna varivestis* 6782.
- pollution effects, chemoreception, host plants, pests, *Insecta* 5132.
- pollution effects, sexual reproduction, *Bracon hebetor* 7441.
- Sulphonamides**, chemical control, culture collections parasites, *Malameba locustae*, *Acrididae* 1002.
- Sumatra**, new species, taxonomy, morphology, *Benbowia elisabethae* 4042.
- new species, taxonomy, morphology, *Thagna bidentata* 8808.
- Summer**, diapause, larvae, photoperiods effects on, *Antheraea yamamai* 3472.
- diapause, photoperiod, hibernation, *Spilarctia imparilis* 7439.
- Sunlight**, orientation, thermoregulatory behavior, *Frontinella communis* 463.
- orientation, thermoregulatory behavior, *Gynaephora rossi* 5906.
- Supercooling**, cold hardness, *Collembola*, Acan, *Diptera*, *Belgica antarctica*, *Cryptopygus antarcticus*, *Antarctic* 3364.
- freezing, cold tolerance, metabolism, *Eurosta solidaginis* 4144.
- Superovulatory**, chromosomes, heterochromatin, population studies, *Gomphocerus sibiricus* 3900.
- heterochromatin, effects on chromosomes banding, *Heteropteris obscurata* 6260.
- mating, diets effects on, *Manduca sexta* 1107.
- Superoxide dismutase**, enzymatic activity, life span, correlation analysis, *Drosophila melanogaster* 946.
- Superparasitism**, intraspecific relationships, fecundity, *Trichogrammatidae* 1226.
- parasitoids, life history, *Autographa californica* 8312.
- Suppression**, oviposition, pheromones, chemoreceptors, morphology, *Rhaoleitis pomonella* 4136.
- phototaxis, host plants olfactory stimuli effects on, *Bombyx mori* 3300.
- Suppressors**, mutation, chromosomes, oocytes, spermatocytes, *Drosophila ananassae* 3098.
- Surface area**, comb, honey hoarding behavior, *Apis mellifera* 8585.
- Surface properties**, eggs, ultrastructure, *Araucaria* 8039.
- Surface water**, vibratory stimuli, communication, aquatic animals, reviews, *Gerridae* 5868.
- Surfactants**, pest control, *Aedes taeniorhynchus*, USA, Florida 674.
- Surgery**, brain centers, effects on food consumption, *Labidura riparia* 479.
- Sericoecia**, keys, morphology 6448.
- Sericoecia fecundus**, new species, taxonomy, morphology, Egypt 6448.
- Sericania**, food plants, pollen, *Meliponinae* 5196.
- Guama virus isolation, *Culicidae* 3427.
- Surveys**, geographical distribution, *Nyctenibiidae*, Philippines 1579.
- Survival**, abundance effects on, mutualism, *Formica subsericea*, *Vanduzeeia arata* 6749.
- abundance, host plants, seeds, *Hamamelis virginiana*, *Pseudanthonomus hamamelidis* 5969.
- adaptations, colonial characteristics, *Polistes exclamans* 3045.
- adults, pupae mass effects on, *Aedes aegypti* 5895.
- age effects, emergence, adults, *Monochamus alternatus* 2905.
- air pollution effects on, sulfur dioxide, *Epilachna varivestis* 2153.
- aquatic environment, environmental effects, toxins, *Chlorella ellipsoidea*, *Culicidae* 6691.
- biological control, weed control, *Rumex obtusifolius*, *Gastrophysa atrocyanea* 5985.
- biometrics, sexual reproduction, *Anopheles darlingi*, Brazil 7527.
- blood meals simulation effects on, rearing, *Triatoma infestans* 2002.
- Cameraria, population density, population regulation, host plants, *Quercus nigra* 2134.
- capture-recapture studies, marking methodology, *Henosepilachna vigintioctopunctata* 3245.
- cattle redwater fever vectors, infection, *Babesia bigemina*, *Boophilus decoloratus* 4205.
- cells, defective mutant, ionizing radiation, ultraviolet radiation, *Drosophila melanogaster* 3902.
- coastal environment, environmental effects, brackish water, *Myrmica rubra*, *Myrmica scabrinodis*, *Lasius flavus*, *Lasius niger* 4455.
- cold hardness, *Cryptopygus antarcticus*, *Paristoma octocutata*, *Antarctica*, Signy I. 6583.
- cold tolerance, adaptations, polar environments, *Insecta*, Canada 980.
- cold tolerance, diapause, pupae, *Heliothis virescens*, *Heliothis zea* 3627.
- cold tolerance, juveniles, *Argiope aurantia* 6028.
- cold tolerance, mating, nutrients, *Tatohila* 6698.
- colonial characteristics, electric fields effects on, power lines, *Apis mellifera* 7570.
- colonial characteristics, inbreeding effects on, *Apis mellifera* 1548.
- colonies, food availability effects on, *Coptotermes formosanus* 4646.
- defective mutant, morphogenesis, melanoma, *Drosophila melanogaster* 1527.
- defoliation effects on, *Pinus kesiya*, *Pinus occipua*, *Insecta* 3596.
- dehydration, water balance, *Tenebrio* 236.
- development, eggs, larvae, *Sirex noctilio* 3470.
- development, food plants, *Triphiodia annulata* 5201.
- development, host plants, *Balanogasteris kolae*, *Cola acuminata*, *Cola verticillata* 8352.
- development, host plants effects on, pest resistance, *Helianthus*, *Empoasca abrupta* 2090.
- Survival, (continued)** development, larvae, culture effects on, *Ostrinia nubilalis* 3485.
- development, life cycle, oviposition, *Argas persicus* 1181.
- development, oviposition, *Phytoseiulus persimilis*, *Amblyseius degenerans* 1870.
- developmental stages, temperature effects, *Haematobia irritans irritans* 2692.
- developmental stages, temperature effects, storage, *Amblyomma americanum* 1129.
- diapause, eggs, oviposition, *Culicidae* 1373.
- diets effects on, *Diaphania nitidalis* 1890.
- diets, larvae, *Nilaparvata lugens*, Japan 1204.
- diets, pest control, processed foods, *Tribolium confusum* 8078.
- dispersal, nuclear polyhedrosis virus marking, females, *Hyphantria cunea* 2858.
- dispersal, population dynamics, disease transmission, *Anopheles culicifacies*, India 1296.
- dispersal, rearing comparison, *Trichoplusia ni* 1168.
- distribution, abundance, *Aedes*, Nigeria 2150.
- effects of diets, *Dacus oleae* 1109.
- egg production, overwintering, *Rhopalosiphum padi*, Finland 5225.
- eggs, fertility, *Atherigona soccata* 4434.
- eggs, larvae, colonies size, *Neodiprion sertifer* 1270.
- eggs, larvae, soil properties effects on, *Popillia japonica* 1864.
- eggs, mature, breeding, *Cochliomyia hominivorax* 6037.
- eggs, microbiocidal activity, methyl-para-hydroxy benzoate, *Schistocerca gregaria*, *Locusta migratoria migratorioides* 5821.
- eggs, staining, *Magiciada* 2702.
- environmental effects, crowding, larvae, *Rhinocyclus conicus* 1938.
- environmental effects, *Ctenocephalides felis* 359.
- environmental effects, temperature, humidity, larvae, *Ixodidae* 1175.
- environmental effects, temperature, relative humidity, *Epilachna varivestis* 1166.
- extracts effects on, intraspecific relationships, *Apis mellifera* 1947.
- fecundity, cold tolerance, genetic drift, *Drosophila melanogaster* 3926.
- fecundity, development, temperature effects, *Sturmiois inferens* 2683.
- fecundity, fertility, methoprene effects on, *Cydia pomonella* 8236.
- fecundity, host plants chemical composition effects on, *Brevicoryne brassicae* 7559.
- feeding, resource allocation, males, gynoparae, *Rhopalosiphum padi* 5919.
- food availability, effects on, *Ctenogaster resolutum* 7808.
- food organisms, body size effects on, predation, *Olios*, survival 1293.
- food plants, *Triphiodia annulata* 2836.
- geographical distribution strains, *Simulium decorum* 2793.
- Gracillariidae, larvae, plant hosts, *Quercus* 2135.
- granulosis virus effects on, parasitoids, *Apanteles glomeratus*, *Pieris rapae* 4190.
- growth, fecundity, *Acyrtosiphon kondoi*, *Medicago sativa* 6944.
- growth rate, population studies, mimicry, *Leptodiptra* 7611.
- growth, substrate preferences, larvae, *Xyletinus peltatus* 2701.
- hardwoods extracts effects on, *Reticulitermes flavipes* 3808.
- host plants environmental stress effects on, *Medicago sativa*, *Therioaphis maculata* 9168.
- host plants population density effects on, *Atherigona soccata*, *Sorghum* 6104.
- host searching behavior, host plants, temperature effects on, *Cydia pomonella* 8277.
- hosts, parasitism effects on, *Agrotis ipsilon* 6753.
- hybridization, *Ostrinia nubilalis*, *Ostrinia umbrobralis*, *Ostrinia penitatis* 7053.
- insecticides, growth regulators effects on, *Spodoptera littoralis* 1837.
- interspecific relationships, biological control, *Musca vetustissima*, *Onitis alexis*, *Onthophagus binodis*, *Onthophagus ferox*, Australia 1308.
- juvenile hormones effects on, *Galleria mellonella* 6764.
- larvae, aggregation, adaptiveness, *Pryteria sinica* 1192.
- larvae, agricultural practices effects on, pest control, *Agrotis ipsilon* 611.
- larvae, breeding sites effects on, *Culex pipiens* 618.
- larvae development, Dufour's gland secretions, *Parischnogaster mellyi* 3551.
- larvae, diets, *Diaprepes abbreviatus* 5147.
- larvae, *Entomoscillus americana*, diets, *Brassica campestris*, *Brassica napus* 2076.
- larvae, environmental effects, *Epilachna varivestis* 6005.
- larvae, food organisms effects on, *Atherigona soccata*, *Sorghum* 558.
- larvae, food plants, oviposition, *Anthracinus cardamines*, *Alliaria petiolata* 5954.
- larvae food sources competition effects on, *Musca autumnalis* 1274.
- larvae, host plants, *Asclepias humistrata*, *Danaus plexippus* 5958.
- larvae, host plants cardenolide effects on, *Asclepias humistrata*, *Danaus plexippus*, USA, Florida 9154.
- larvae, host plants, chemical composition, *Aedes triseriatus* 6818.
- larvae, host plants chemical composition effects on, *Pieris rapae*, *Paropsis atomaria* 7567.
- larvae, host plants, pest resistance, *Sitona* 6902.
- larvae, infestation, crop fields, *Diatraea grandiosella* 3737.
- larvae, nesting behavior, *Onitis belial*, *Onitis ion* 6661.
- larvae, oviposition habitat preferences effects on, *Drosophila nigrospiracula*, *Drosophila mettleri* 406.
- larvae, oviposition, host plants, *Papilio glaucus canadensis* 3595.
- larvae, oviposition site preferences, *Chionocheura fumiferana* 5849.
- larvae, pest resistance, comparison, *Solanum berthaultii*, *Solanum tuberosum*, *Leptotarsus decemlineatus* 8548.
- larvae, pest resistance hosts, guinea-pigs, *Dermacentor andersoni* 5272.
- larvae, seasonal variations, wells, *Anopheles stephensi* 616.
- larvae, temperature, humidity effects on, *Amblyomma americanum* 1860.
- mass rearing, methodology, *Simulium damnosum* 2494.
- moisture absorption, eggs, *Anacridium aegyptium* 6849.
- nuclear polyhedrosis virus, forests soil, transmission, *Orygia pseudotsugata*, USA, California 280.
- nutrient deficiencies, pyridoxine, vitamins, larvae, *Heliothis virescens* 1744.
- occurrence, *Coniferales* plantations, *Magiciada* 6161.
- ova hatching, diagnosis, medical importance, *Sarcoptes scabiei* 3668.
- overwintering, *Agrotis ipsilon*, USA, Missouri 9202.
- overwintering, host plants, *Lygus* 6012.
- oviposition, temperature effects on, temperature 5082.
- parasites effects on, colonies, *Mattiorella crustosa*, *Nasutitermes corniger*, *Nasutitermes ephraeae* 4193.
- parasites, hardwoods parasite resistance effects on, *Bifiditermes beesonii* 481.
- parasites, pest control, biological control, *Romanomermis culicivorax*, *Aedes polynesiensis*, *Tokeleau* Is. 7630.
- parasites, *Spalangia cameroni* 9141.
- parasitoids, effects on hosts behavior, adaptiveness, *Euphydryas phaeton* 1220.
- parasitoids, effects on hosts behavior, natural selection 6752.
- parasitoids, insecticides effects on, *Amritus hesperidum*, *Prospaltella opulenta*

Survival, (continued)

2245.
pathogens, diets effects on, *Aedes aegypti*, *Smittium culisetae* 2645
pathogens, digestive tract, *Monaxella bovis*, *Musca autumnalis* 8136
pathogens effects on, feeding, *Bacillus thuringiensis*, *Heliothis virescens* 8159
pathogens, *Erwinia carotovora*, vectors, *Drosophila melanogaster*, *Drosophila busckii* 1446
pesticide resistance, DDT, *Culex quinquefasciatus* 5770
pests, environmental effects, relative humidity, *Copidosoma koehleri* 1935
pheromones, survivor, foot-print pheromone, *Apis mellifera* 3350
pollution effects, insecticides, streams, *Insecta* 5437
population dynamics, colonies, *Pogonomymex occidentalis*, USA, Nebraska 6987
population dynamics, gynoparae, life cycle, *Rhopalosiphum padi* 2681
population dynamics, gynoparae, *Rhopalosiphum padi*, Finland 5226
population growth, temperature effects, *Anthonomus grandis* 3641
population studies, females, *Aedes albopictus*, Uganda 1295
population studies, mathematical analysis, *Culicidae* 4090
predators, population density, *Phytoseiulus persimilis*, *Amblyseius degenerans* 4468
pupae, soil properties effects on, *Dacus opulace*, *Dacus tenuifascia* 1305
radiation, genetics, *Anthonomus grandis* 2296
rearing, development, *Bissus leucopuncta* 65
rearing, *Onchocerca volvulus* vectors, *Simulium damnosum* 5058
rearing, population dynamics, development, *Spodoptera exempta*, Kenya 1310
rearing, population dynamics, development, *Spodoptera exempta*, Kenya 1310
reproduction, *Rhopalosiphum padi*, *Prunus padus* 2838
response, wood, essential oils, *Coptotermes heimi* 2850
seasonal variations, larvae, *Spodoptera exempta* 577
seasonal variations, population density, capture-recapture studies, *Tenebrionidae* 595
seedlings, herbivores effects on, *Gutierrezia microcephala*, *Hesperotettix viridis* 7556
selection, pest control, sterile-release, *Anthonomus grandis* 3718
sex differences, irradiation, *Strontium 90*, *Glossina palpalis* 1470
spermatosa, amino acids effects on, *Apis mellifera* 4277
starvation, comparison, *Mallos gregalis*, *Dytiscina* 1212
storage, collection, *Jalysus spinosus* 730
temperature effects, larvae, *Heteronychia arator* 369
temperature effects on, larvae, pupae, adults, *Patasson lameerei* 9055
temperature effects on, *Oligonychus subdus*, *Oligonychus milleri* 8283
temperature effects on, *Tritonia sordida* 9082
temperature, humidity, stored products, *Triticum*, *Sitophilus oryzae* 6977
temperature, relative humidity, effects on, *Pauidia peregrina* 7504
thermoregulation, poikilotherms, cold tolerance, *Alaskotermes antarcticus* 976
toxicity, insecticides, diflubenzuron, *Hypera posica* 7420
turf, mowing, *Endria infumata*, *Oscitella* 6132
workers, leishmaniasis, *Psychodopygus intermedius* 9223
workers, tick-borne encephalitis virus, *Haemaphysalis intermedia* 4491
water temperature effects on, immature stages, *Anopheles culicifacies*, Pakistan, Punjab Province 6697
winter, aggregation, *Hippodamia quinquesignata*, Canada, Alberta 3637
winter, *Anthonomus grandis*, USA, Mississippi 614
winter, diapause, hybrid, *Heliothis sublella*, *Heliothis virescens* 1102
winter, *Hemiptera*, USA, South Carolina 4555
winter, larvae, *Anbascaria gemmatilis*, USA, Mississippi 1273
wood extracts effects on, *Reticulitermes flavipes*, *Coptotermes formosanus* 1810
workers, queens pheromones effects on, *Apis mellifera* 4647

Sus acrota,

- livestock, pesticide applications, spraying, Mallophaga, Anophora, Psoroptidae 8429

Susceptibility,

- anesthesia, chromosomes, biochemical analysis, lipids, *Drosophila melanogaster* 3447

- cattle, scabies infestation, *Psoroptes ovis* 2170

- damage, lindane effects on, *Pinus sylvestris*, *Hylobius* 9315

- demonstration virus infection, population genetics, *Bombyx mori* 2351

- disease transmission parasites, *Sarcoptes scabiei*, Canada 1331

- ectoparasites transmission, domestic animals, *Psoroptes ovis*, *Ovis canadensis* 651

- eggs, parasitoids, *Trichogramma minutum*, *Choristoneura fumiferana* 8329

- fungicides, stored products pests, food plants effects on, *Callosobruchus chinensis* 1672

- herbivory, host plants, vegetation patterns effects on, *Aristolochia reticulata*, *Batus philenor* 2072

- host plants, cultivars, *Poa pratensis*, *Sphenophorus parvulus* 5327

- host plants, feeding, *Nephotettix virescens*, *Oryza sativa* 8569

- host plants, pests, bionomics, *Medicago sativa*, *Therioaphis trifolii* 7757

- host plants, pests, *Brevicoryne brassicae*, *Brassicaceae* 6085

- host plants, pests, cultivars, *Mulla pumila*, *Laspeyresia pomonella* 5313

- host plants, pests damage, *Panicum miliaceum*, *Anthonomus varius soccata* 7704

- host plants, pests, infestation, chemical control, *Manihot esculenta*, *Mononychellus caribbeanae* 1428

- host plants, pests infestation, *Synanthedon pictipes* 7755

- host plants, pests, oviposition, orientation, *Nilu parvulus* 7680

- host plants, pests, *Picea glauca*, *Pikotermes alenensis* 7785

- host plants, pests, *Solanum melongena*, *Leucodermis orbonalis* 7310

- host plants, pests, *Trogoderma granarium*, *Triticum* varieties 9304

- host-parasite interactions, diet, *Aedes aegypti*, *Brugia pahangi* 288

- infection, bluetongue virus, *Phlebotomus papatasi* 3412

- infection, inheritance, parasites, *Brugia pahangi*, *Wuchereria bancrofti*, *Aedes* 8140

- infection, *Megachile rotundata*, *Ascophaera aggregata* 5729

- infection, parasites, developmental stages, *Romanomermis culicivorax*, *Culex pipiens* 1438

- infestation, host plants, damage, *Ameloylo transiella*, *Prunus amygdalis* 2240

- inheritance, *Glossina morsitans*, *Trypanosoma congolense* infection 8158

- insecticides, host plants, *Spodoptera frugiperda* 3010

- insecticides, pest control, *Hypothenemus hampei* 8199

- insecticides, pyrethroids, pesticide resistance, methyl parathion, *Heliothis virescens*, USA, South Carolina 4226

- insecticides, selection, males release, *Anopheles gambiae* 6135

- insecticides, strains, *Anopheles* 3441

- insecticides, toxicity tests, pests, *Locustana pardalina* 5039

- juvenile hormones analogs, effects on fertility, emergence, *Sitotroga cerealella* 1062

- larvae, nuclear polyhedrosis virus, *Agrotis ipsilon* 3402

Susceptibility, (continued)

- larvae, pathogens, biological control, *Anopheles stephensi*, disease transmission 654
malara transmission, *Culicidae*, USA, Florida 1320
malara vectors, *Plasmodium*, *Anopheles* 7629
malathion, pesticide resistance, temperature effects, *Oryzaephilus surinamensis* 1058
nuclear polyhedrosis virus, larvae, *Spodoptera exempta* 268
nuclear polyhedrosis virus, *Lymantria dispar*, *Maestria brassicae*, *Spodoptera littoralis* 2635
parasites developmental stages, diflubenzuron, *Bioesther longicaudatus*, *Anastrepha suspensa* 357
parasites, pupae, *Neoleptocampa carpocapsae*, *Galleria mellonella*, *Bombyx mori* 3406
parasitism, vitamin deficiencies effects on, *Polyplax spinulosa*, *Rattus rattus* 6779
pathogenicity, *Bacillus thuringiensis*, *Achaea janata*, *Spodoptera litura* 7378
pathogenicity, serotypes, *Bacillus thuringiensis*, *Galleria mellonella* 5733
pathogens, *Aedes*, *Brugia malayi*, *Brugia pahangi* 3647
pathogens, *Beauveria bassiana*, *Nomuraea rileyi*, *Bombyx mori* 8130
pathogens, biological control, *Diptera*, *Bacillus thuringiensis israelensis* 7651
pathogens, disease resistance biotypes, *Erynia neoaphidis*, *Acyrtosiphon pisum* 8128
pathogens, effects on larvae development, nuclear polyhedrosis virus, *Bacillus thuringiensis*, *Heliothis armigera* 7377
pathogens, genetics, *Aedes aegypti*, *Drosophila*, *Brugia* 2623
pathogens, instars, temperature effects on, *Bombyx mori* 8130
pest resistance, host plants, *Silobion avenae*, *Triticum aestivum* 2986
pesticides, comparative studies, *Acarina* 394
pesticides, comparative studies, *Boophilus microplus* 593
pests, cultivars, *Poa pratensis*, *Sphenophorus parvulus* 537
pests, host plants, sulfur dioxide effects on, *Phaeolus vulgaris*, *Epilachna varvetsi* 6782
pupae, parasitism, *Neoleptocampa carpocapsae*, *Lepidoptera* 287
pyrethroids, developmental stages, *Culex pipiens* 311
pyrethroids, methyl parathion pesticide resistance, *Heliothis virescens* 8201
toxicity, insecticides, ¹⁴C-phosphate, *Myzus persicae*, *Brevicoryne brassicae* 2658
variability, geographical distribution effects on, Japanese encephalitis virus, *Culex inaequalis* 6952
varnates, pests infestation, *Saccharum officinale* 6952
- Susanna himi,**
new species, taxonomy, morphology 4031
- Susanna himi,**
new records, geographical distribution, Palearctic Region 4031.
- Swamp,**
paleontology, Upper Carboniferous, *Insecta*, USA, Pennsylvania 2376.
- Swarming,**
comb construction effects on, apiculture, *Apis mellifera* 3775.
courtship, sex pheromone, *Diplazon pectoratorius* 5110.
mating behavior, population studies, *Culicoides variipennis*, USA, Virginia 5106.
sex ratio, males, *Belgica antarctica*, *Antarctica* 6016
- Swarming behavior,**
aggregation pheromone, *Camponotus pennsylvanicus* 9074.
aggression chemical stimuli pheromones, workers, *Atta*, *Acromyrmex* 4651.
colonial characteristics, soil, *Isopora*, India 5426.
flight activity, *Ophya leucostoma* 8288
geographical distribution, *Odonotermes distans* 467
queens pheromones effects on, *Apis mellifera* 746.
- Swarm,**
catching methods, apiculture, synthetic pheromones, *Apis mellifera* 5292.
dispersal, engorgement, workers, *Apis mellifera adansonii* 5210.
homing behavior, habitat preferences, *Apis mellifera caucasicus*, *Apis mellifera carnica* 6991
migrations, community composition, *Pieris rapae*, *Pieris napi*, *Vanessa cardui*, *Syrphus*, Poland Coast 5212.
nesting preferences, *Apis mellifera* 8394.
sex ratio, mating behavior, *Eucocephala* 6671
thermoregulation, energetics, *Apis mellifera* 240
workers, body weight estimation, population studies, *Apis mellifera* 8027.
- Sweden,**
abundance, species composition, new records, *Sphecidae* 7087.
collections, galls, host plants, *Insecta* 3599
development, geographical variations, *Lithobius crassipes* 5071.
entomofauna, *Aleocharinae* 4712.
galls, formation, host plants, *Insecta* 7558
geographical distribution, new records 3943
geographical distribution, new records, *Diptera* 3945
geographical distribution, new records, *Nyctinidia* 3946.
host preferences, oviposition, host plants, *Brassicaceae* 4401
lakes, community composition, succession, developmental stages, *Coleoptera* 3857.
larval, morphology, life history, *Ilybius angustior* 3986
mating behavior, circadian rhythms, geographical variations, *Acrolepiopsis assectella* 5107
new records, geographical distribution, check lists, *Microlepidoptera* 4722.
new records, geographical distribution, *Microlepidoptera* 7089
new records, geographical distribution, *Coleoptera* 7092.
new records, geographical distribution, *Coleoptera* 7094
new records, geographical distribution, *Gyrinus pullatus* 7102.
new records, geographical distribution, *Heterocerus senescens* 7090
new records, geographical distribution, *Ichnemonidae* 4724.
new records, geographical distribution, *Leiodes rufipennis*, *Leiodes gallica* 7093.
new records, geographical distribution, *Microlepidoptera* 7085.
new records, geographical distribution, *Plusia chryson* 7083
new records, geographical distribution, rare species, *Liodoria serricornis*, *Alechara spissicornis*, *Grammoplectus spinolae* 4726.
new species, taxonomy, morphology, *Athetia ehnsroemi* 4777.
new species, taxonomy, morphology, *Oligella nana*, *Oligella intermedia* 3977.
new species, taxonomy, morphology, *Siphona martini* 7180.
occurrence, *Colias hyale*, *Colias croceus* 4719
occurrence, geographical distribution, historical account, *Coleoptera* 3941.
occurrence, *Borbonina pygmaea* 4717
parasites, infestation, migratory species, *Aves*, *Ixodes ricinus*, *Ixodes arboncola* 7549
pathogens, new records, *Coleomyces*, iridescent virus, *Aedes cantans*, *Aedes cinereus* 8139

Sweden, (continued)

- pest outbreaks, *Oryctes nasicornis* 4539.
pheromones traps, comparison, capture efficiency, *Ips typographus* 719.
pollination, *Listera ovata*, Ichneumonidae, Symphyta, Coleoptera, Diptera 5204.
population studies, sampling, abundance, *Plagiognathus arbutorum* 3807.
rare species, new records, geographical distribution, Macrolepidoptera 7086.
resource utilization, foraging behavior, niche breadth, *Bombus* 4480.
streams, life cycle, diapause, feeding, *Ephemera danica*, *Siphonurus aestivalis* 3055.
surveys, crop fields, insecticides, effects on community composition, Araneae, Opiliones 4459.
surveys, feeding behavior, hematophagy, 15 families, Diptera 4351.
workers, morphology, keys, identification, *Formica rufa* 4106.
- Sweden, Åbleko,**
habitat, ecology, geographical distribution, forests, Coleoptera 4424.
new records, geographical distribution, *Acerbia alpina* 4713.
- Sweden, Gotska Sandöen I.,**
new records, geographical distribution, Coleoptera 4704.
- Sweden, Halltorps Hage,**
entomofauna, rare species, Coleoptera 4725.
- Sweden, Lattajäure I.,**
benthos, species composition, ecological distribution, depth, substrate preferences, Chironomidae 7020.
- Sweden, Medelpad, Laxåan R.,**
appendages, malformations, pigmentation, Ephemeroptera, Plecoptera 4656.
- Sweden, Rickhäls R.,**
growth, nymphs, Ephemeroptera 3850.
- Sweden, Upland,**
new records, geographical distribution, morphology, genitalia, males, *Plusia mandarina* 4714.
- Sweden, Uppsala,**
seasonal variations, occurrence, spatial distribution, crop fields, Carabidae, Staphylinidae 4543.
- Sweden, Vindelälvsn R.,**
benthos, overwintering, sediments, ice, Tricoptera, Chironomidae 3648.
- Sweet potato feathery mottle virus,**
transmission, *Aphis gossypii*, *Ipomoea setosa*, *Ipomoea* nil 3819.
- Swimming behavior,**
activity patterns, *Ensisfera* 5154.
environmental effects, Blattidae 9047.
- Switzerland,**
bogs, ecological distribution, species composition, Lepidoptera 6874.
check lists, species composition, Staphylinidae, new records, geographical distribution, *Lathrimaeum prolongatum*, *Mycetopus santicensis*, *Sepedophilus constans*, *Athea cellaria* 7099.
check lists, species composition, Symphyta 8680.
life cycle, oviposition, egg production, development, *Hybomitra bimaculata* 6718.
medical importance, allergens, *Pyroglyphidae* 672.
medical importance, Chilopoda, Diplopoda 641.
migrations, autumn, range, *Syrphidae* 9169.
new records, geographical distribution, *Gryllomorpha dalmatina*, *Tetrix undulata* 9465.
new records, geographical distribution, *Heterathus acris* 7095.
new records, geographical distribution, morphology, *Indomyrmex humilis* 7091.
new records, infection, hosts, *Entomophthora erupa*, *Notostira elongata* 6609.
new species, taxonomy, morphology, *Ormithomya rupes* 6405.
pest outbreaks, biological control, parasitoids, species composition, *Zeiraphera diniana* 7546.
pests, biological control, crop rotation, *Ostrinia nubilalis* 6917.
pests, pests, stored products, pesticide resistance 6921.
pests, population dynamics, orchards, *Malus*, *Lithocolletis blancardella* 6918.
population structure, age, breeding, *Tabanidae* 4449.
surveys, parasites, *Mustelidae*, new records, *Rhadinopsylla pentacantha*, *Siphonaptera* 5194.
zoogeography, species composition, *Coclotus* 7900.
- Switzerland, Geneva L.,**
new records, geographical distribution, *Acentropus niveus* 779.
- Switzerland, Munt La Schera,**
migrations, species composition, *Syrphidae* 6815.
- Switzerland, Valais,**
new species, taxonomy, morphology, *Plusiocampa bonadonai pavani* 4822.
- Switzerland, Chirayita,**
extracts, pest control, efficacy, *Bagrada cruciferarum* 7682.
- Sybra moczulsi,**
new species, New Guinea 3182.
- Sycorcytes comparabilis,**
new species, morphology, host plants, *Mascarene* Is., Reunion I. 4877.
- Sycoscapter anepes,**
new species, morphology, host plants, *Mascarene* Is., Reunion I. 4877.
- Sycoscapter hirticola,**
new species, taxonomy, morphology, India 8830.
- Sycoscapter tibialis,**
new species, morphology, *Mascarene* Is., Reunion I. 4877.
- Sylepta derogata,**
larvae, pathogenicity, *Paceliomyia farinosus* 1001.
population growth, pests, *Gossypium* 9282.
surveys, parasites, *Nigeria*, *Ibadan* 5938.
- Sylepta ruralis,**
parasites infection, *Platiphora syleptae* 998.
- Sylvilagus floridanus,**
nontarget organisms, pest control, *Cochliomyia hominivorax*, USA, Southwest 2206.
pest resistance, infestation, skin sensitization antibodies, *Haemaphysalis leporispalustris*, *Dermacentor variabilis* 5276.
- Symbiotes,**
abundance, factors affecting, *Glossina* 5173.
digestive tract, cellulose digestion, *Cunninghamella echinulata*, *Odontotermes obsesus* 4364.
digestive tract, enzymatic activity, chitinase, *Neotermes bosci*, *Odontotermes distans*, *Speculitermes cyclops* 926.
digestive tract, occurrence, *Leidyana*, *Nephanis serripoda* 6751.
digestive tract, prokaryotes, culture, *Lolita grandis* 2808.
effects on elimination, radioisotopes, chromium, strontium, *Gromphadorhina portentosa*, *Gromphadorhina schaefferi* 8108.
effects on fertility, *Wolbachia*, *Ephestia cautella* 501.
effects on hosts, pathogens, *Xenorhabdus nematophilus*, *Neocaplectana carpopapseae*, *Hyalophora cecropia* 2641.

Symbiotes, (continued)

- Angella* ultrastructure, bacteria, *Foiana*, *Pyronympha* 5172.
functional morphology, dimorphism, pathogens, *Xenorhabdus*, *Neocaplectana*, *Heterorhabdus*, *Galleria* 4189.
inoculation, colonial characteristics, *Termitomyces*, *Macrotermite* 2809.
isolation, yeasts like microorganisms, *Nilaparvata lugens* 1215.
lipid biosynthesis, metabolism, *Reticulitermes flavipes*, *Coptotermes formosanus* 3573.
man, species composition, *Calliphoridae*, *Sarcophagidae* 9259.
microorganisms, transmission (sexual), *Rhizopertha dominica* 7536.
migrations, bacteria, *Pedicular humanus* 4366.
mycetome, antibiotics effects on, diets, *Rhizopertha dominica* 7535.
new species, taxonomy, *Onthophagus*, *Cosmetoclellops* 800.
physiology, metabolism, *Euscelis incisus* 6748.
survival, hardwoods extracts effects on, protozoa, *Reticulitermes flavipes* 3808.
yeasts like, antibiotics effects on, mortality, *Nilaparvata lugens* 8307.
- Symbiosis,**
association, evolution, ecological evaluation, reviews, *Asigmatia* 6295.
cecum, bacteria, *Lolita grandis* 4365.
host plants, nutrients, *Cecropia*, *Formicidae* 4398.
host plants, pollinators, *Ficus*, *Aggonidae* 2848.
morphology, physiology, genetic factors, *Sitophilus* 5174.
nitrogen-fixing bacteria, *Enterobacter agglomerans*, *Dendroctonus terebrans*, *Dendroctonus frontalis*, *Ips avulsus* 1214.
oviposition inhibition, parasitoids, *Sclerotium asteris*, *Asteromyia carbonifera*, *Torymus capax* 8309.
Sirex noctilio, *Amlyostereum arcuatum* 3470.
species composition, *Formicidae* nests, *Diplopoda* 8382.
uric acid recycling, gut bacteria, *Reticulitermes flavipes* 3574.
- Symbiotes duryi,**
synonymy, *Symbiotes gibberosus* 4805.
- Symbiotes gibberosus,**
synonymy, *Symbiotes duryi*, *Symbiotes montanus* 4805.
- Symbiotes montanus,**
synonymy, *Symbiotes gibberosus* 4805.
- Symmetrischema capsica,**
parasites life history, *Agathis*, *Apanteles*, *Bracon*, *Apelophrys capsicum*, *Perisierola* 6720.
- Symmetrischema kendallorum,**
new species, taxonomy, morphology, USA, Texas 7992.
- Symnecidae,**
taxonomy, systematics, Spain, Portugal 2466.
- Sympatric populations,**
aggregation, feces pheromones, *Tipula acuta*, *Tipula simplex*, USA, California 6721.
comparison, morphology, nesting behavior, *Schizotetranychus celarius* 4465.
competition, USA, land use effects on, *Pteris oleracea*, *Pteris aquilina*, USA 1286.
ecological distribution, population genetics, *Aedes*, Kenya 2868.
food plants, life history, *Papilionidae*, Brazil 5233.
habitat, *Morpho granadensis* polybaptus, *Morpho peleides* limpida, Costa Rica 6019.
hybrids, morphology, *Anabolia furcata*, *Anabolia nervosa*, Europe 7052.
interspecific hybridization, *Dolichopoda geniculata*, *Dolichopoda laetitia* 7863.
interspecific hybridization, *Lygus elisus*, *Lygus desertinus*, Arizona 3607.
interspecific relationships, *Morpho granadensis* polybaptus, *Morpho peleides* limpida, Costa Rica 5141.
interspecific relationships, sexual behavior, *Megaryssa* 409.
niche pattern, speciation, food sources, *Drosophila*, Australia 5496.
population genetics, speciation, *Anopheles farauti*, *Australia* 1556.
reproductive isolation, acoustic communication, *Schizocosa ocreata*, *Schizocosa rooseae* 3541.
reproductive isolation, *Callosoma* 5247.
reproductive isolation, hybridization, *Ostrinia* 7050.
reproductive isolation, life history, *Enchenopa* 6856.
reproductive isolation, mating behavior, *Ostrinia* 6659.
resource utilization, activity patterns, feeding behavior, *Leptomermes* 2900.
resource utilization, feeding, *Drosophila* megagynes, *Drosophila notua*, Australia 3590.
speciation, behavior effects on, *Drosophila heteroneura*, *Drosophila silvestris* 1562.
taxonomy, morphology, *Apodemus mormo*, USA, Arizona, Santa Cruz Co. 6878.
- Sympatry,**
new species, *Nanorchestes antarcticus*, *Nanorchestes bellus*, *Nanorchestes lalae*, *Nanorchestes breckensteini*, Antarctica, Victoria Land 4703.
speciation, host plant food selection, geographical variations, *Apidae* 1544.
- Sympetrum madidum,**
habitat, morphology, larvae, Canada, British Columbia, Riske Creek 6495.
- Symphoromyia,**
breeding, site location, substrate preferences 3534.
- Symphyla,**
geographical distribution, new records, USSR 7100.
- Symphyla,**
check lists, species composition, Europe, Carpathian Basin 8682.
check lists, species composition, Switzerland 8680.
flight traps 2464.
occurrence, species composition, Crete 6427.
phylogeny, brain morphology 7066.
pollination, *Listera ovata*, Sweden 5204.
species composition, geographical distribution, Canada, Alberta, George L. 7818.
taxonomic revision, nomenclature, Finland 7209.
taxonomy, morphology, Sri Lanka 5598.
- Symptelids,**
parasitoids, *Hydrellia valida*, USA, Florida, Oyster Bay 3621.
- Symptel bimaculata,**
ovoviviparity, sexual reproduction 5835.
- Symptel capitata,**
synonymy, *Symptel pallens* 5835.
- Symptel pallens,**
synonymy, *Symptel capitata* 5835.
- Symptoms,**
allergic diseases, house dust, man, *Dermatophagoides pteronyssinus* 7634.
bites, case reports, *Arachnida* 668.
diagnosis, parasites, *Sarcoptes scabiei* hominis 9269.
ear ectoparasites, goats, *Railletia manfredi*, *Psoroptes cuniculi*, Australia 650.
infection, *Megachile rotundata*, *Ascosphaera aggregata* 5729.
nuclear polyhedrosis virus infection, *Adisura stinksoni*, *Stomopteryx subscissella*, *Papilio demoleus*, *Phaeta flammaris* 290.

- Symptoms, (continued)**
scabies, man 2185.
- Synaldis fraudulenta**,
new species, morphology, Tunisia 2449.
- Synanthedon**,
pests, pheromone traps catches, synthetic pheromones effects on 1383.
- Synanthedon exitiosa**,
attractants, sex pheromone, efficacy, comparison, *Synanthedon pictipes* 2231.
pests, pheromone traps catches, synthetic pheromones effects on 1383
sex pheromone, source density, mating behavior disturbance 699.
- Synanthedon hector**,
pest control, pheromone traps, fruit trees 2992.
trapping, sex lures, Japan 5334.
- Synanthedon pictipes**,
attractants, sex pheromone, efficacy, comparison, *Synanthedon exitiosa* 2231
feeding behavior, host plants, visual stimuli, flight 5929.
pests, infestation, host plants susceptibility 7755.
pests, pheromone traps catches, synthetic pheromones effects on 1383.
pheromone traps, sex pheromone, efficacy, longevity 2230
synthetic sex pheromone, attractancy 7338.
- Synanthedon rhododendri**,
chemical control, insecticides timing, flight activity, pheromone traps 700.
- Synanthedon salmachus**,
mortality, larvae, New Zealand 4415.
- Synanthedon tipuliformis**,
infestation, *Ribes nigrum*, effects on, yield, crop production, Tasmania 689
pests, biological control, field trials, parasites, *Neoplectana bibionis* 7767
pests, infection, *Neoplectana bibionis* 2207
polymorphism, coloration 5647.
- Synapse**,
neuromuscular junctions, electrical properties, ultrastructure, *Lepidoptera* 4116.
- Synapses**,
membrane potential, neurons, ocelli, brain, *Locusta* 4961.
- Synaptonemal complex**,
attachment sites, chromosomes, spermatocytes, *Bombyx mori* 9406.
- Synaptosomes**,
Centruroides suffusus neurotoxins binding, effects on sodium channels, brain,
rats 8175.
choline uptake, central nervous system, *Locusta migratoria* 4964.
neurotransmitters, rats, neurotoxins effects on, α -latrotoxin, *Latrodectus*
mactans *tredecimguttatus* 8179.
- Synephaelactum racemosum**,
infection, *Nilaparvatha lugens* 1815.
- Synchronizations**,
nymphs development, nests, *Oodotermes stercoreivorus* 6997.
- Synelia fuscalis**,
morphology, larvae, life cycle 7265.
- Synepacma vinella**,
morphology, adults, larvae 4925.
- Synesus cornutus**,
pests, infestation, wood 9271.
- Syndecia ekocula**,
new species, taxonomy, morphology 5570.
- Synecology**,
dunes, *Coleoptera*, Namibia, Namib Desert, Gobabeb 9205.
- Synemosyna americana**,
taxonomy, synonymy, morphology, *Synemosyna bicolor* 5547
- Synemosyna bicolor**,
taxonomy, synonymy, morphology, *Synemosyna americana* 5547
- Synergism**,
epidemiology, infestation, man, *Pediculus humanus*, India, Goa 4517.
insecticides, malathion, kumia, *Nephotectus ciniceps* 3434
insecticides, pesticide resistance, *Lapops* 1841.
insecticides, toxicity, *Ostrinia nubilalis* 3440
insecticides, toxicity, *Tribolium castaneum* 7405
juvenile hormones analogs, pest control, stored products, *Tribolium castaneum*
2239
mutagens, mutagenesis, *Drosophila melanogaster* 7043
pathogens, *Xenorhabdus luminescens*, *Heterorhabdus bacteriophora*, *Culex pipiens*
4202
pesticides (organophosphorus), malathion, pesticide resistance, *Tetranychus*
kanzawai 3449
pesticides toxicity, *Spodoptera littoralis* 7400
toxicity, isodilipolyl alcohol, carbamate insecticides, *Tribolium castaneum*
7416.
- Synergists**,
piperonyl butoxide, MGK 264, DEF, insecticides, eldrin, methomyl, mortality,
Spodoptera littoralis 9023.
- Syneta**,
morphology, systematics 2394
- 9-Synhydroxy-dieldrin**,
eldrin metabolites, acute toxicity, *Blaberus discoidalis* 301
- Synsauridae**,
geographical distribution, new records, Sweden 3945
- Synoea surinama**,
colonial characteristics, nest building 4643
nests, communication, social behavior 4305
population dynamics, reproductive strategy 5222
- Synoea virginea**,
sound production (biological), nests, defense mechanisms 3847
- Synonymy**,
Acampocladus, *Phycoidella* 4828
Acanthoscelides claudestinus, *Bruchus multistriatus* 3186.
Atheta strinati, *Atheta mariei*, Switzerland 7621
Bolbotrups, *Frankliniella* 3233
Bombylius hexmaculatus, *Bombylius albicapillus*, taxonomy 1622
breeding, *Dendrocerus aphidum*, *Dendrocerus breadaiensis* 4019
Broadheadia, *Aornella* 4909
Cerocephala dubare, *Cerocephala rufa* 2459
Clitorapha ventosa, *Eremotylus boguschi* 4026
Coccus capensis, *Coccus phyllicae* 2437
Coccus celatus, *Coccus consimilis*, Papua New Guinea 3215
Culicoides moritai, *Culicoides mihensis* 1575
Culicoides moritai, *Culicoides mihensis* 1575
Dichelacera leucotibialis, *Dichelacera diaphorina* 3202
eggs morphology, *Allonarys*, *Pteronarys* 8036
- Synonymy, (continued)**
Endonepenthia, *Megastelia* 7181
Epispheres, *Amoea* 4057
Epithecus xylochora, *Taygete parvella* 4052.
Frankliniella ornata, *Frankliniella pseudotritici* 1677
genera, taxonomic revision, *Scototylus*, North America 2390
Geosiba carli, *Spalia lindrohi* 4787
Hamaba bahamensis, *Hamaba minima* 1601
Hermatobotas haddoni, *Hermatobotas walkeri* 3208
Hydropsyche dissimulata, *Hydropsyche modesta* 4067
keys, morphology, USA 5651
keys, morphology, USA 5651
morphology, *Acraea alcipoe*, *Acraea aurivillii* 1658
morphology, *Coleophora hafneri*, *Coleophora oriolella*, *Coleophora turollella*,
Coleophora escalerae 3223
morphology, taxonomy, *Acanthoscelides* 7162
morphology, taxonomy, *Brachygeophilus*, *Dysmesus* 3236.
morphology, taxonomy, *Trybliographa* 4879
new species, *Marasma patnalis*, *Marasma bilinealis*, *Marasma ruralis*,
Chnaphaloceros medialis, Southeast Asia 842
nomenclature, taxonomy, *Erythemis*, *Lepthemis*, *Mesothemis* 846.
nomenclature, taxonomy, *Neosasa* 4004
Ophiogomphus incurvus, *Ophiogomphus carolinus* 8001
Paragnetia famji, *Paragnetia kansensis* 6456
parasites, *Brachyotocoris puncticornis*, *Brachyotocoris heidemanni* 32
Phymatocera nuchula, *Phymatocera offensa* 2507
Polystema uophaga, *Polystema mendeli* 4037
Pimplidae, systematics 4032
Pseudoschoengastia tucali, *Hoffmannella beltrami*, Venezuela 4764
Psyllaephagus tobiasi, *Psyllaephagus balencensis* 4113
Pulvinaria longisqua, *Pulvinaria elongata* 3820
Simulium cerquetra, *Simulium permatas* 3995
Singulatus, *Euryurus* 4911
species, taxonomic revision, *Phrynus*, America 2388
Symploce capitata, *Symploce pallens* 5835
systematics, *Nomada* 4033
Tarsonemus suskianus, *Tarsonemus susku* 79
taxonomic revision, *Acanthotrachetes brasiliensis*, *Euscopus flavicaudis* 2392
taxonomic revision, *Arillus* sayi, *Agrilus browni* 2397
taxonomic revision, *Alloleptenia* 4886
taxonomic revision, *Brachypterus subuliculus*, *Cybocephalus subuliculus* 8759.
taxonomic revision, *Cixius*, *Pseudocixius*, USA, Mexico 6426.
taxonomic revision, *Concoce capensis*, *Concoce hessei*, Africa, South 4900
taxonomic revision, *Conotelia* 8750
taxonomic revision, *Curculioninae*, Japan 1599
taxonomic revision, geographical distribution, keys, *Shariophora* 1653
taxonomic revision, *Ichneumonidae* 4870
taxonomic revision, *Lorditho*, North America, Central America 6380
taxonomic revision, *Lychnuchoides frappenda*, *Atrytonopsis*, Mexico 7994
taxonomic revision, *Nemophthalma brentini*, Brazil 7157
taxonomic revision, nomenclature, *Saldula latcollis* 6414
taxonomic revision, nomenclature, *Niota pendleburyi*, Oriental Region 6412
taxonomic revision, *Nomus parvus*, *Nomus francivellus*, *Nomus sengalensis*,
Formosus muelien *Formosus millenianus* 4803
taxonomic revision, *Oemyllops*, Australia 3227.
taxonomic revision, *Parandra* 6505
taxonomic revision, *Phleidea bicolor*
taxonomic revision, *Shariophora*, Czechoslovakia 4875
taxonomic revision, *Sphagocera*, *Sphagocera sahlerbergi*, Brazil 6381.
taxonomic revision, *Stenodynerus* 8832.
taxonomic revision, systematics, *Eucera* 4880
taxonomic revision, *Teras obtusana*, *Peronea fuscana*, *Acleris lacordairana*, *Teras*
longulana, *Acleris notata*, *Acleris himbrana*, *Teras pulveriana*, *Acleris boscania*,
Finland 7232
taxonomic revision, *Tingis* 4855
taxonomic revision, *Tityus serrulatus vellardi*, *Tityus serrulatus* 4769
taxonomic revision, types, *Eucoidella* 7990
taxonomy, *Aenictus decolor*, *Aenictus batesi*, *Aenictus bidentatus* 38
taxonomy, *Agyrtus nobeli*, *Agyrtus bicolor* 6359.
taxonomy, *Allocaecia zekia*, *Allocaecia wrayi* 6457.
taxonomy, *Anthrôdus*, Japan 1608
taxonomy, *Aphodius*, Italy 3981
taxonomy, *Asolcus plautiae*, *Trissolcus japonicus* 4020
taxonomy, *Banasa* 6418
taxonomy, *Blaps lethifera*, *Blaps abdita* 8770
taxonomy, *Brasiliarius plicatus*, *Brasiliarius luridipennis* 8752.
taxonomy, *Bruchidae*, Nearctic Region 3162
taxonomy, *Buprestidae* 6378
taxonomy, *Centrophelomyia furcata*, *Thyreolepida cinerea*, Israel 4002.
taxonomy, *Chironomus paulfreemani*, *Chironomus brunneus* 3999.
taxonomy, *Chorinae australis*, *Chorinae kanthopsis* 1648.
taxonomy, *Coccinellidae*, Neotropical Region 7956.
taxonomy, *Coleoptera* 806
taxonomy, *Conostigmus cylindricus*, *Conostigmus melanocephalus* 8833.
taxonomy, *Cortix*, Europe 5576
taxonomy, *Culicoides*, Israel 8797.
taxonomy, *Diplazon* 4031
taxonomy, *Estenonemus*, *Vianodes* 8774
taxonomy, *Formicaphagus grillariae*, *Formicaphagus rhamphasti* 3225.
taxonomy, fossils, Pleistocene epoch, USA, California, *Scarabaeidae* 2404
taxonomy, genera, *Gugnotus*, *Hydrogylus* 2396.
taxonomy, *Hydrogylus*, *Gugnotus* 4796
taxonomy, *Hylastes rufipes*, *Hylastes salebrosus*, *Hylastes opaculus*, *Hylurgus*
scabripennis 1596
taxonomy, *Leptyphantes*, Europe, Alps 7899
taxonomy, *Manestra passa*, *Grapphania mutans* 3224.
taxonomy, *Mesembryus*, *Hesychia* 4050.
taxonomy, *Mindae* 5581
taxonomy, morphology, *Achryson* 6362
taxonomy, morphology, *Braconidae* 7215.
taxonomy, morphology, *Caloptilia tetratypa*, *Caloptilia octopunctata* 7219.
taxonomy, morphology, *Carabus* 8772.
taxonomy, morphology, *Caryocolum*, Europe 4887.
taxonomy, morphology, *Cestruoides* 8744.
taxonomy, morphology, *Depressaria* 7225.

Synonymy, (continued)

- taxonomy, morphology. *Diplolepis rosae* 1645.
 taxonomy, morphology. *Epicauta* 5562.
 taxonomy, morphology. Geometridae, Noctuidae 4894.
 taxonomy, morphology. keys. *Tricorynus herbanus*, *Tricorynus rubiventris*, *Tricorynus subulaber*, *Tricorynus distinctus* 2403.
 taxonomy, morphology. Macropsini 3212.
 taxonomy, morphology. Megacanthaspis, new species, taxonomy, morphology, phylogeny, Megacanthaspis 7202.
 taxonomy, morphology. *Microdon globosus*, *Microdon lanceolatus*, *Microdon ruficornis*, *Microdon trisus* 2427.
 taxonomy, morphology. *Misolampidius clavicornis*, *Misolampidius okumurai* 8773.
 taxonomy, morphology. *Neocyphus ocellatus* 6382.
 taxonomy, morphology. Pachymeninae, Brazil 6374.
 taxonomy, morphology. Sciomyzidae 4825.
 taxonomy, morphology. Symphyta, Sri Lanka 5598.
 taxonomy, morphology. *Synemosyna bicolor*, *Synemosyna americana* 5547.
 taxonomy. *Mormonota peracuta*, *Persectata aversa* 3224.
 taxonomy. *Neopleria tristis*, *Chunopleria nigrescens* 7240.
 taxonomy, nomenclature. *Braconia superciliosa*, *Alecdoffula alcedinus* 5607.
 taxonomy, nomenclature. *Heteropsini*, *Purpuricenus* 4807.
 taxonomy, nomenclature. *Uloomyia*, *Clogmia* 7960.
 taxonomy. *Nomia* 5601.
 taxonomy. Opinae, Microgasterinae, Hungary 8687.
 taxonomy. *Pachynematus smithae*, *Pachynematus angustatus* 4034.
 taxonomy. parasites, *Trichomalus* 5592.
 taxonomy. *Pegohylemyia macra*, *Hylemyia betarum* 30.
 taxonomy, phylogeny. *Sophodhris* 5610.
 taxonomy. *Prokelisia*, USA 8813.
 taxonomy. *Protochrysomyia howardae*, *Cochliomyia macellaria* 7183.
 taxonomy. *Pseudotremex* 8775.
 taxonomy. *Pseudocorpsus* 5552.
 taxonomy. *Psychodidae* 5568.
 taxonomy. *Radfordiana*, *Schoengastia*, Papua New Guinea 4763.
 taxonomy revision. *Archisolia*, *Salduba* 1621.
 taxonomy revision. *Meranoplus*, *Dicraspis*, *Calypotymex*, Ethiopian Region 1652.
 taxonomy revision. *Oedaleus* 1670.
 taxonomy revision. *Parabolioponinae* 1640.
 taxonomy revision. *Scirphophaga* 1662.
 taxonomy. *Salicidae* 8734.
 taxonomy. *Sarcophaga formosana*, *Sarcophaga longicornis* 4835.
 taxonomy. *Sciomyzidae* 5572.
 taxonomy. *Simulium nitidum*, *Simulium metallicum* 3196.
 taxonomy. *Sphaecidae*, Palaearctic Region 8828.
 taxonomy. *Sphinx purpuralis*, *Zygaena purpuralis* 4044.
 taxonomy. *Stingiphilus lophostis*, *Stingiphilus transversifrons* 3225.
 taxonomy. *Sturmiodex incomptus*, *Sturmiodex caliginosus* 3225.
 taxonomy. *Symbiotus gibberosus*, *Symbiotus duryi*, *Symbiotus montanus* 4805.
 taxonomy. *Tabanus sulcifrons*, *Tabanus tectus*, *Tabanus exul* 28.
 taxonomy. *Tachinus pseudoproximus*, *Tachinus roborowskii*, China, People's Rep 7173.
 taxonomy. *Tanytarsus bernhardi*, *Tanytarsus longitarsis* 4829.
 taxonomy. *Tinea* 5511.
 taxonomy. *Trichocylliba* 3975.
 taxonomy. *Tylotropidius royi*, *Tylotropidius gracilipes* 780.
 taxonomy. *Zelotes javanus*, *Drassodes ciusi* 5548.
 taxonomy. *Trochiloschema armenica*, *Trochiloschema medusa* 7947.
 taxonomy. *Vibroperta zippa*, *Petroperta ada* 6458.
 taxonomy. *Xestopus*, *Wittmerosiphodrus*, Nepal 808.
Syntermes,
 defense secretions, chemical composition 1799.
Syntermes brevimalatus,
 defense secretions, chemical composition 1799.
Syntermes dirus,
 defense secretions, chemical composition 1799.
 pests, infestation. *Manihot esculenta* crop fields, Brazil, Para State 4597.
Syntermes molestus,
 defense secretions, chemical composition 1799.
Syntermes peruanus,
 defense secretions, chemical composition 1799.
Synthesis,
 aggregation pheromone, *Tribolium castaneum*, *Tribolium confusum* 2594.
 cuticle, malesterone A effects on, *Oncopeltus fasciatus* 3487.
 cytochrome, mitochondria, fat body, diapause, *Heliothis zea* 5818.
 (2)-9,11-dodecadien-1-yl acetate, sex pheromone, *Diparopsis castanea* 1777.
 ecdysone, assays, neurosecretion cells, *Manduca sexta* 3343.
 ecdysteroids, embryogenesis, *Locusta migratoria* 3345.
 juvenile hormones, activity, *Musca domestica*, *Culex pipiens pallens* 2581.
 juvenile hormones, inhibition, precocious effects on, *Ageratum houstonianum* 3442.
 kermesic acid, anthraquinones, *Coccidea* 4154.
 royal jelly, queen substance, *Apis mellifera* 5697.
 sex pheromone, analogs, *Pseudococcus comstocki* 4165.
 sex pheromone, *Aphomia gularis* 2595.
 sex pheromone, *Carposina niponensis* 2596.
 sex pheromone, *Lepidoptera* 3729.
Synthetic,
 components, sex pheromone attractancy disruption, *Choristoneura fumiferana* 2756.
 pheromones, effects on pheromone traps catches, *Synanthedon* 1383.
Synthetic aggregation pheromone,
 attractancy, *Tribolium castaneum*, *Tribolium confusum* 2591.
Syrphidae,
 Aphididae predators, phenology, British Isles, England 8392.
 community composition, trophic status, food preferences, seasonal variations, annual variations, British Isles 3617.
 foraging behavior, diets, functional morphology, tongue length 5922.
 foraging behavior, flowers, interspecific relationships, *Bombus* 2115.
 larvae, association, fruit bodies, fungi, *Helomyzidae*, larvae, association, fruit bodies, fungi 538.
 migrations, autumn, range, Switzerland 9169.
 migrations, flight, capture-recapture studies, Switzerland 9170.
 migrations, species composition, Switzerland, Munt La Schera 6815.
 predator-prey interactions, anti-predator behavior, *Schizolachnus pineti* 8293.
 surveys, habitat, geographical distribution, pollinators, *Syrphidae*, Denmark 5514.
Syrphus,
 swarms, migrations, *Pieris rapae*, *Pieris napi*, *Vanessa cardui*, Poland Coast 5212.

Syrphus corollae,mortality. *Allium sativum* extracts 9025.**Systematics**,

- bionomics, *Histemi* 8766.
 classification, status, *Eucilidae* 8712.
 classification systems, role, conservation, *Lepidoptera* 4760.
 classification, taxonomy, *Insecta* 3169.
 classification, Xeroconiopteryx, *Coniopteryx* 2468.
 fauna, Limonide, France 4728.
 geographical variations, morphology, parapatric populations, *Lycæna xanthoides*, USA, California 7123.
 identification, taxonomy, enzymes, *Aphis fabae* 7206.
 information systems, computers, *Arthropoda* 4759.
 intraspecific hybridization, *Muellerianella brevipennis*, *Muellerianella extrusa*, *Muellerianella fairmairi* 5487.
 karyotypes, classification systems, *Pentatomoidae* 7977.
 Mesembryus, *Zygaena* 4049.
 morphology, antennal sensilla, *Braconidae* 2509.
 morphology, geographical distribution, *Muellerianella* 7204.
 morphology, keys, *Driminae*, India 7212.
 morphology, *Orsodacne*, *Syneia* 2394.
Myllaena, Nearctic Region 4742.
Nomada, synonymy 4033.
 nomenclature, *Nesaea* 839.
 nomenclature, *Spilostethus pandurus* 7196.
Phaogennini 4029.
 phylogeny, taxonomy, *Trachypachidae*, *Hydradephaga* 4785.
Pompilidae, synonymy 4032.
 surveys, *Geometridae*, Italy 3143.
 synonymy, *Agrilus sayi*, *Agrilus browni* 2397.
 taxonomic revision, *Metacilis* 2460.
 taxonomic revision, *Faculidae*, *Tetrammidae* 4767.
 taxonomic revision, species, *Hilaia* 7153.
 taxonomic revision, synonymy, *Eucerceris* 4880.
 taxonomy, *Encyrtidae* 4025.
 taxonomy, new genera, *Ebona plana*, *Elsieia* 2434.
 taxonomy, new species, *Cricotopus zavreli* 2424.
 taxonomy, *Nomadinae* 4030.
 taxonomy revision, *Coniopterygidae* 1664.
 taxonomy, *Tineidae*, *Symmocidae*, *Pterophoridae*, Spain, Portugal 2466.
Trichoptera 4067.
 use, display, courtship, agonistic behavior, *Salicidae* 8731.

Systema marginalis,infestation, damage, *Pinus clausa*, USA, Florida 5168.**Systemocentrus japonicus**,morphology, geographical variations, synonymy, *Systemocentrus uyemurai*, Japan 6496.**Systemocentrus uyemurai**,morphology, geographical variations, synonymy, *Systemocentrus japonicus*, Japan 6496.**Systropus**,

new species, taxonomy, morphology, China, People's Rep., Taiwan 3991.

Systropus aurantispinus,

new species, China, People's Rep. 8786.

new species, taxonomy, morphology, China, People's Rep. 3991.

Systropus bifurcus,

new species, China, People's Rep. 8786.

new species, taxonomy, morphology, China, People's Rep. 3991.

Systropus microstropus,

new species, China, People's Rep. 8786.

new species, taxonomy, morphology, China, People's Rep. 3991.

Systropus permiger,

new species, China, People's Rep. 8786.

new species, taxonomy, morphology, China, People's Rep. 3991.

Systropus tetractylus,

new species, Taiwan 8786.

new species, taxonomy, morphology, Taiwan 3991.

Szygium cumini,host plants, galls, new species, *Fergusonia szysgii*, India 4831.**Szygium jambolana**,damage, host-parasite interactions, *Antispila anna* 3593.**Tabanidae**,

- adults, larvae, morphology 1584.
 autogeny, first record, Brazil 1132.
 disease transmission vectors, aging methods 4493.
 drinking behavior, flight 4360.
 geographical distribution, bionomics, species composition, Paraguay 7125.
 life history, population dynamics, Brazil, Manaus 4426.
 livestock pests, hematophagy, life cycle, pest control 3743.
 males, life cycle, France 9113.
 new species, taxonomy, morphology, China, People's Rep. 814.
 population structure, age, breeding, Switzerland 4449.
 population studies, age composition, reproductive status 9206.
 species composition, new records, USSR, Amur 9462.
 temporal variations, population numbers, interspecific relationships, horses 1376.

Tabanus,

hematophagy, cattle, Canada, Quebec 2802.

Tabanus abdominalis,

morphology, taxonomy 28.

pests, population levels, USA, South Dakota 8576.

Tabanus abactor,

geographical distribution, seasonal variations, USA, Texas 2361.

Tabanus abdominalis,

morphology, taxonomy 28.

Tabanus canipalpis terterjani,

new subspecies, taxonomy, morphology, USSR 6390.

Tabanus chongangensis,

new species, taxonomy, morphology, China, People's Rep. 814.

Tabanus dorsiger dorsivittatus,

life history, seasonal variations, Brazil, Manaus 4426.

Tabanus dorsiger modestus,

life history, seasonal variations, Brazil, Manaus 4426.

- Tabanus exul**,
taxonomy, synonymy, *Tabanus sulcifrons* 28.
- Tabanus gladiator**,
morphology, taxonomy 28.
- Tabanus importunus**,
life history, seasonal variations, Brazil, Manaus 4426.
- Tabanus leleai**,
hosts, parasitism, *Rhipicephalus furanicus* 9133.
- Tabanus luseola**,
pest control, population studies, USA, Massachusetts, Cape Cod 732.
- Tabanus nefarius**,
morphology, taxonomy 28.
- Tabanus nigrefronti**,
new species, taxonomy, morphology, China, People's Rep. 814.
- Tabanus nigrovittatus**,
developmental genetics, enzymes, electrophoresis, body length 2336.
- Tabanus pingbianensis**,
pest control, population studies, USA, Massachusetts, Cape Cod 732.
- Tabanus proximus**,
new species, taxonomy, morphology, China, People's Rep. 814.
- Tabanus proximus**,
5-hydroxytryptamine, proctolin, effects on, smooth muscles, contraction, reproductive organs 965.
- Tabanus quinquevittatus**,
hematophagy, cattle, Canada, Quebec 2802.
- Tabanus similis**,
population decline, environmental effects, grazing, weather, USA, South Dakota 4474.
- Tabanus sulcifrons**,
morphology, taxonomy 28.
- Tabanus tectus**,
taxonomy, synonymy, *Tabanus sulcifrons* 28.
- Tachinophagus zealandicus**,
parasitoids, new records, hosts, *Protocalliphora* 4378.
- Tachinidae**,
parasites, *Schistostegia decussata* 5189.
- Tachinidae**,
parasitism, Pentatomidae, USA, Texas, USA, South Carolina 2019.
- Tachinomyia**,
traps, catches, oviposition 55.
- Tachinus**,
new species, taxonomy, morphology, China, People's Rep. 7173.
- Tachinus axillaris**,
morphology, teratology 1719.
- Tachinus pseudoproximus**,
taxonomy, synonymy, *Tachinus roborowskii*, China, People's Rep. 7173.
- Tachinus roborowskii**,
taxonomy, synonymy, *Tachinus pseudoproximus*, China, People's Rep. 7173.
- Tachycineta thalassina**,
nests, association, *Ceratophyllus* 6873.
- Tactile discrimination**,
sex, interspecific relationships, *Notonecta alauca* 414.
- Tactile perception**,
Paraglossa americana, mechanoreceptors, femur spine neurons, electron microscopy, 122.
- Tactile stimuli**,
conspecifics recognition, mating behavior, *Enallagma* 6669.
- Tadaria aegyptia thomasi**,
feeding behavior, diet, Insecta, India 5221.
- Tadzia tucuruensis**,
new species, taxonomy, morphology, Brazil, Para 4854.
- Taenia saginata**,
parasites, biological control, predation, Scarabaeidae, Kenya 1317.
- Taeniaptera**,
morphology, taxonomy, Brazil 3992.
- Taeniaptera**,
taxonomy, morphology, keys, South America, Amazon R. Basin 4830.
- Taeniaptera albipennis**,
morphology, Brazil 7186.
- Taeniaptera albitarsis**,
morphology, taxonomy, Brazil 3992.
- Taeniaptera allicae**,
new species, taxonomy, morphology, Brazil 3992.
- Taeniaptera angulata**,
morphology, Brazil 7186.
- Taeniaptera annulata**,
morphology, Brazil 7186.
- Taeniaptera inpai**,
new species, taxonomy, morphology, Brazil 3992.
- Taeniaptera iascia**,
geographical distribution, taxonomy, morphology, South America, Amazon R. Basin 4830.
- Taeniaptera tarsata**,
morphology, taxonomy, Brazil 3992.
- Taeniaptera teresacriniae**,
new species, taxonomy, morphology, Brazil 7186.
- Taeniaptera tibialis**,
morphology, taxonomy, Brazil 3992.
- Taeniomyia**,
morphology, taxonomy 816.
- Taenipoda eque**,
defense secretions, composition, sex pheromone, mating behavior 5010.
- Taenipodidae**,
new records, geographical distribution, range extension, streams, USA, Colorado 3165.
- Taenipodidae nelsoni**,
new species, taxonomy, morphology, USA, Virginia 4906.
- Tagetes**,
polyacetylenes, toxicity, chemical control, *Aedes aegypti* 317.
- Tagetes erecta**,
host plants, new records, *Tetranychus neocaledonicus*, India, Punjab 6804.
- Tahiti**,
new species, Oribatida 7139.
- Taiwan**,
biological control, pests, Homoptera 1451.
- Taiwan**,
new species, taxonomy, morphology, *Aesala imanshii* 8776.
- Taiwan**,
new species, taxonomy, morphology, *Mycertina sarajii* 7169.
- Taiwan**,
new species, taxonomy, morphology, *Systropus tetractylus* 3991.
- Taiwan**, (continued)
new species, taxonomy, morphology, *Systropus tetractylus* 8786.
- Taiwan**,
pests, new records, geographical distribution, *Pieciplis cardamomi* 2359.
- Taiwan**,
population studies, pesticide resistance, *Nephotettix cincticeps* 8504.
- Taiwan**,
wildlife conservation, industries, Lepidoptera 2113.
- Tallaperia**,
new genera, taxonomy 6458.
- Talpa europaea**,
hosts, parasites morphology, *Eadua brevivittata* 796.
- Tamborinea commoni**,
new species, taxonomy, morphology, phylogeny, Australia 2412.
- Tanacetum vulgare**,
extracts, feeding behavior deterrents, Lepidoptera 6742.
- Tanasecia corytus visayana**,
new species, taxonomy, morphology, Philippines 4890.
- Tanais**,
host plants, chemical composition, herbivores, reviews, Insecta 6010.
- Tanyoprymnus monodoloides**,
nesting behavior, biology, nest building 1901.
- Tanytarsus**,
pest control, golf courses ponds, urea growth regulators 8546.
- Tanytarsus**,
pest control, growth regulators, urea, Bay SIR-8514 4601.
- Tanytarsus**,
synonymy, *Halotanytarsus tika* 818.
- Tanytarsus bernhardi**,
synonymy, nomenclature, *Tanytarsus longitarsis* 4829.
- Tanytarsus coffmani**,
new records, geographical distribution, USA, North Carolina 7117.
- Tanytarsus dissimilis**,
pollution effects, alum, toxicity 4218.
- Tanytarsus longitarsis**,
synonymy, nomenclature, *Tanytarsus bernhardi* 4829.
- Tanytarsus zanthus**,
community composition, correlation, algae, Canada 2295.
- Tanzania**,
Anthicidae 3982.
- Tanzania**,
new species, taxonomy, morphology, *Afroplitosia aelleni* 7246.
- Tanzania**,
new species, taxonomy, morphology, *Microtrichia tanzaniae*, Whartonia 1012.
- Tanzania**,
new species, taxonomy, morphology, *Notonecta bhiwanensis* 3982.
- Taphroderopsis mendax**,
morphology, females, Brazil 6358.
- Tapinoma erraticum**,
social organization, trophallaxis, nest provisioning, brood care, environmental effects 4651.
- Tapinoma nigerrimum**,
Coccophagus (*Cimicis*), *Metaphycus*, interspecific relationships, parasitism, France 1012.
- Tapinoma sessile**,
nesting behavior, colonial characteristics, movements 7004.
- Taragana diplocyema**,
larvae, chromosome number 2322.
- Taragana sra**,
chromosomes, karyotypes, India 5468.
- Tarsonemidae**,
decomposition, leaf litter 2133.
- Tarsonemini**,
new species, taxonomy, morphology, 5 species, Ethiopia 7932.
- Tarsonemus**,
new species, taxonomy, morphology, USSR 6347.
- Tarsonemus curiosus**,
new species, taxonomy, morphology, USSR, Crimea 6342.
- Tarsonemus lacer**,
new species, taxonomy, morphology, USSR, Crimea 6342.
- Tarsonemus suskianus**,
larvae, morphology 79.
- Tarsonemus suskii**,
synonymy, *Tarsonemus suskianus* 79.
- Tarsoptilus**,
new genera, taxonomy 4063.
- Tartessinae**,
taxonomy, morphology, geographical distribution, New Guinea, Australia 7884.
- Tasmania**,
geographical distribution, *Edwardsina spinosa*, *Edwardsina tasmaniana* 3193.
- Tasmania**,
infestation, *Synanthedon pupiformis*, *Ribes nigrum*, effects on, crop production, yield 689.
- Tasmania**,
new species, taxonomy, morphology, *Isodermus dimorphus* 4010.
- Tasmania**,
yellow, infection, *Beta vulgaris*, *Aphis craccivora*, *Aulacorthum solani*, *Macrosiphum euphorbiae*, *Myzus persicae* 6097.
- Tasmania**, Fidler L.,
hydrology, environmental conditions, ecological distribution, *Chaoborus* 6225.
- Tasmanocoenis**,
longevity, life history, freshwater environment, Australia, Northern Territory, Magela Creek 4657.
- Taste aversion**,
defense mechanisms, *Phasianus colchicus*, *Coccinellidae* 9120.
- Taste perception**,
antennal sensilla, ultrastructure, *Calliphora vicina* 6529.
- Taste perception**,
chemoreceptors, larvae, *Drosophila* 4141.
- Taste perception**,
sense organs, mouthparts, ultrastructure, *Drosophila melanogaster* 133.
- Tatocilla**,
mating, nutrients, effects on survival, cold tolerance 6698.
- Taurine**,
biosynthesis, metamorphosis, pupae, *Manestra configurata* 389.
- Taurine**,
effects on cardiac muscle, action potential, *Locusta migratoria* 241.
- Tauritermes vitalis**,
new species, taxonomy, morphology, Brazil 8835.
- Taxodium**,
pests, life cycle, *Dioryctria pygmaella*, USA, Florida 3560.
- Taxonomy**,
47 new species, morphology, Malachidae, Asia, Himalayan Mts. 7944.
- Taxonomy**,
biology, conferences, Insecta 5542.
- Taxonomic revision**,
Alloidynerus koenigi 9458.
- Taxonomic revision**,
Aphanta 4895.
- Taxonomic revision**,
Aphanistes, North America 6435.

Taxonomic revision, (continued)

bibliographies, literature reviews, *Carpophilus humeralis* 3764
Caledonomorpha, New Guinea 4806
Chaetophlosia balissi, *Atrophiloscia* 7246
Cicindela lunulata subspecies, World 7983
classification, systematics, *Eucollidae* 8712
Dilophus febrilis, *Dilophus humeralis*, *Dilophus antipedalis*, Europe 7182.
Euplognatha ovata 7152
Entomophthora, effects on pathogens taxonomy, fungi 830.
Eustegania, Philippines, Papua New Guinea 3989.
Enocleridia, Iberian Peninsula 6445.
genera, *Oreodalla*, Nearctic Region 2426
genera, synonymy, *Scotinotylus*, North America 2390.
geographical distribution, *Caromothrips*, Australia, New Zealand 4064.
Gonolabis, Australasian Region 7959
Helochares lividus, *Helochares punctatus*, *Helochares obscurus*, Europe 7170.
Himeuka 4018.
Hylaeus, Australia 4749
identification keys, *Aedes scutellaris*, Tonga 6406.
identification keys, *Exalcidion* 4780
identification keys, *Trichonyssodryx*, Brazil 4778
keys, *Anthaxia passerini* 8748.
keys, *Hylaeus* 4022.
keys, identification, *Neosilba* 4702.
Limosina 2417.
Macromalthinus, Brazil 7941.
Micropterigiodes, Spain, Iberian Peninsula 2467
Minotocyphus, *Ceropalinae*, *Pompiilinae* 8826
morphology, *Aedes pulchritarsis* 6404
morphology, *Apoanagyrus* 4025
morphology, *Araucobius*, North America 7940
morphology, *Callespeteria* 5597
morphology, *Drepanotermes*, Australia 836
morphology, *Euchistus* 5583
morphology, *Euxoa comosa* 7996
morphology, *Halidayia* 7972
morphology, *Hyphydrus* 4816
morphology, keys, *Deunophloeus* 4800
morphology, keys, *Frenchia* 3216
morphology, keys, *Heterosternuta* 4771
morphology, keys, *Microculex* 6408
morphology, keys, *Staphylinidae* 5558
morphology, *Liophilus* 5551
morphology, *Metaselenia* 838.
morphology, *Myllaenini* 4111.
morphology, *paipus*, *Aedinus*, *Tunolestes*, *Anoediorpora* 6407
morphology, *Paraxillis*, Brazil 6373.
morphology, *Phanoperla* 4905
morphology, phylogeny, *Prosmidites*, Africa 7168
morphology, *Satapes* 7232
morphology, *Simulium quadrifidum* 3196
morphology, *Stenodynerus* 8832
morphology, synonymy, *Conotelus* 8750
morphology, synonymy, *Tungis* 4855
morphology, *Teleas* 2461
morphology, *Tropoxylon*, Formosa 4884
morphology, 9 species, *Composcerus*, *Paramoecerus*, Brazil 6364
Nocemphera pictipennis, *Nocemphera striata*, Finland 7961
new genera, *Alloclimensia* 4886
new genera, *Brillia* par, *Xylotopus*, Nearctic Region 3994.
new genera, *Gypsona*, *Marganallana*, *Carnosea* 2444.
new genera, *Hydroptilidae*, Australia 8703
new genera, *Neomachilota*, USA, Florida 2464
new genera, new species, *Clerodini*, *Laminiae*, Africa 7939
new genera, *Tydesia* *Iewisi* 7948
new species, *Laccobius* 805
8 new species, morphology, *Pseudostegania* 8787.
new species, morphology, *Xestia*, North America 40.
new species, new genera, *Cleradini*, Australia 3210.
new taxa, *Curculioninae*, Japan 1599.
new taxa, morphology, *Disemboldus*, North America 5549.
Niphogenia 6399.
nomenclature, *Cetoniidae* 8751.
nomenclature, morphology, *Hadrodactylus* 4038.
nomenclature, *Neoperla pallescens*, *Neoperla apoana*, *Neoperla claggi*, *Neoperla pallicornis*, *Phanoperla claggi* 8002.
nomenclature, *Olipium savignyi*, *Olipium kochi*, *Olipium bicolor* 7934
Nocemphera, *Symphyta*, Finland 7209.
nomenclature, synonymy, types, *Eucollidae* 7990
nomenclature, synonymy, *Xylota pendleburyi*, Oriental Region 6412.
Nymphidae, Australia 3227.
parasites, *Iguanacarus* 9
Pephyssena 4857
Perissopalla, Venezuela 4764.
Phaenognatha, Australia 2402.
Phallosphaera 4835
phylogeny, *Diptera* 6398.
Pseudodontodynerus 8818.
Pseudobolbus championi, *Pseudobolbus major*, Panama 7943.
Pseudostegania, *stegana* 3980
Quedius, USA, Oregon 2399.
reclassification, genera, *Clytrinae*, Nearctic Region, Neotropical Region 7945.
reclassification, *Melitidae* 6436.
reclassification, *Microgasterinae* 6437.
reclassification, *Rachionotomyia*, *Tricholeptomyia*, *Tripteroides*, Oriental Region 6394
Rhyacophilidae, Canada 6462.
Sesioptera, North America 2453.
Shariphora, Czechoslovakia 4875.
Shistocerca americana 2470.
Siphona, Europe 7180.
8 species, *Paraedus*, Oriental Region 6410.
species, *Platygastridae*, Finland 7894.
species, synonymy, *Phrynus*, America 2388.
synonymy, *Acanthodraustes brasiliensis*, *Eucorpius flavicaudis* 2392.
synonymy, *Agrius sayi*, *Agrius browni* 2397.

Taxonomic revision, (continued)

synonymy, *Brachypterus subclivus*, *Cybocephalus subclivus* 8759.
synonymy, *Cixius*, *Pseudocixius*, USA, Mexico 6426
synonymy, *Conocroc capensis*, *Conocroc hessei*, Africa, South 4900.
synonymy, geographical distribution, keys, *Shariphora* 1653.
synonymy, *Ichneumonidae* 4870
synonymy, *Lordilithon*, North, America, Central America 6380.
synonymy, *Lychnuchoides frappaenda*, *Atrytonopsis*, Mexico 7994.
synonymy, *Nemoecephaline*, *Brentini*, Brazil 7157.
synonymy, nomenclature, *Saldula latcollis* 6414.
synonymy, *Notoxus parvus*, *Notoxus francavilleus*, *Notoxus sengalensis*, *Formicorus muelleri*, *Formicorus millerianus* 4803.
synonymy, *Parandia* 6505.
synonymy, *Phredole* 6430.
synonymy, *Sphagoeme bicolor*, *Sphagoeme sahbergi*, Brazil 6381.
synonymy, systematics, *Eucerceris* 4880.
systematics, check lists, species, *Hilaia* 7153.
systematics, *Metaculis* 2460.
birds parasites, *Erythroneura*, *Tribblemidae* 4767.
Terax obtusana, *Acleris laconidiana*, *Acleris boscana*, Finland 7222.
Timasius, *Neotomias*, *Hyrcanus* 4860.
Titius stigmurus 4769.
Taxonomic significance,
respiratory system, *Trumbidiiformes* 156.
Taxonomy,
Anopheles, Thailand 6479.
antennae morphology, karyotypes, *Orthocladus bipunctellus* 6411.
Anthicidae, West Indies 1612.
bibliographies, literature reviews, *Carpophilus humeralis* 3764.
biochemical analysis, Dufour's gland secretions, *Halictinae* 3384.
biogeography, *Aranea* 1568.
birds parasites, *Erythroneura*, USA, Hawaii 795.
Buprestis splendens 3983.
Carolella beavorana, USA, California 6722.
Cerambycidae, Nepal 1609.
check lists, families, *Ephemeroptera* 7975.
cladistic analysis, families, *Julida* 9441.
classification, computer programs, *Arthropoda* 1586.
classification, morphology, *Ischypsiobius smreczynskii*, *Ischypsiobius weglarskiae*,
Ischypsiobius volubilis 8842.
classification, phenology, *Andrena*, Japan 6433.
classification, role, chromosomes, *Insecta* 3976.
classification systems, nomenclature, *Hydroporus* 4772.
classification systems, *Tenebrionidae* 4794.
Coleoptera, West Indies 806.
Culicoides, Israel 8797.
cytology, chromosomes, *Aphidinae* 7846.
defence secretions, chemical composition, *Bulbitermes singaporensis* 2609.
defence secretions, chemical composition, *Staphylinidae*, New Zealand 247.
developmental stages, *Archithremma ulachensis* 4936.
Dillitenomus, *Epitoniomus*, *Dillitenomus filiformis* *murdus*, North America 4027.
Elkneria pudibunda, Spain, Iberian Peninsula 5157.
Encarsia prospectella, synonymy, *Trichoporus*, new genera, *Prinaprospectella*,
morphology 2450.
Erora, North America 6329.
fauna studies, *Noctuidae*, Germany, Dem. Rep. 1573.
fossils, Pleistocene epoch, synonymy, paleontology, USA, California, *Scarabaeidae*
2404.
genetic relationship, enzymes electrophoresis, *Euchloe simponia*, *Euchloe crameri*
8662.
geographic distribution, *Psittes*, Japan 2445.
geographical distribution, *Anopheles*, France, Lyon 1571.
geographical distribution, *Apanetes*, Hungary 3157.
geographical distribution, *Hoplia*, North Africa 1600.
geographical distribution, *Mycomyini* 5569.
geographical distribution, *Oribatei*, India 7151.
geographical distribution, *Ozophora atropica*, South America 2370.
geographical distribution, species composition, *Geometridae*, Italy 7116.
geographical distribution, swarming behavior, *Odonotermes distans* 467.
hemocytes, physical characteristics, *Noctuidae* 6543.
homonymy, *Brachiopoda*, *Lepidoptera* 7991
host plants, geographical distribution, reviews, *Uroleucon* 6808.
hosts, parasites indicators, *Myiobidae*, *Chiroptera* 5950.
hybridization, *Saturnia mendocino*, *Saturnia walterorum* 7864.
hybrids, *Chrysocarabus* 3110.
hydrocarbons, biochemical characteristics, *Onymacris plana*, *Onymacris*
rugatipennis 5687.
hydrocarbons, biochemical characteristics, *Stenocera gracilipes* 6565.
identification, agricultural practices, medical importance, *Insecta*, Africa 3782.
identification, collections, *Insecta*, Kenya 3175.
identification, collections, status, *Insecta*, Malawi 3174.
identification, *Insecta*, Africa 3179.
identification, status, economics, *Insecta*, Africa 3176.
identification, status, *Insecta*, Egypt, Arab Rep. 3177.
identification, wings morphology, *Aphelinus*, *Mesidia*, *Mesidiopsis* 4108.
inventories, world genera, *Glyphipteridae* 6297
Jalyus spinosus, *Jalyus wickhami* 3947.
karyotypes, *Eusimulium* 2409.
karyotypes, *Helophorus aquaticus*, *Helophorus aequalis* 6259.
karyotypes, hydrochromatin characterization, *Eumigus* 3092
karyotypes, *Tetranychidae* 3086.
keys, *Asilidae*, India 4001
keys, *Australophlebotomus* 3195.
keys, *Damascaria*, Madagascar 3209.
keys, *Ennominae*, Canada 5654.
keys, *Helicula rogalis*, *Helicula*, morphology, instars 1657
keys, *Hylaeus* 4022.
keys, morphology, *Calyptopogon* 26.
keys, morphology, *Ectrepesthoneura*, Palaearctic 811
keys, morphology, geographical distribution, new records, USA, New York, *Ectobius*
sylvestris 2472.
keys, morphology, nymphs, *Diploperla*, *Diploperla duplicata*, *Diploperla murgani*
1674
keys, morphology, *Pomplinae*, Argentina 1655.
keys, new genera, *Modelstenochroa* 8749
keys, parasitoids, *Aphidiidae* 6769

Taxonomy, (continued)

- keys. Quernaspis, Neoguernaspis 1713.
 keys. Xyronotidae 4061.
 Lepidoptera, morphology, new species, Nearctic Region 3201.
 life history, developmental stages, *Centrophilebomyia furcata*, Israel 4002.
 males morphology, Acleridae 6424.
 morphology, Acandae, Anoetidae, Tunisia 2385.
 morphology, *Acraea alciope* 1658.
 morphology, Acridoidea, South America 1671.
 morphology, Acndomorphia, West Africa 4747.
 morphology, adults, *Dysdera concinna* 6504.
 morphology, aedeagus, *Helicobus* 4840.
 morphology, *Alabidocarpus minor*, *Alabidocarpus nyctali*, *Alabidocarpus*
intercalatus, *Alabidocarpus pleociti*, *Alabidocarpus* 5652.
 morphology, *Alathetus* 4853.
 morphology, *Albardia*, *stilbopteryx* 3226.
 morphology, *Alucita parvella* 4052.
 morphology, *Amara*, *Zezea*, France 6498.
 morphology, *Amblyseius umbraticus*, Nearctic Region, Palaearctic Region 8723.
 morphology, *Amphimnemura albifasciata*, *Amphimnemura lebezi*, Nepal 3231.
 morphology, *Amphizoa kashmirensis* 4789.
 morphology, Anobidae, Mediterranean Region 1604.
 morphology, Anthomyiidae 30.
 morphology, Anthomyiidae, Australia 5574.
 morphology, *Apodius*, Italy 3981.
 morphology, *Archrocyrticini* 3183.
 morphology, *Blaste hilaris*, Spain 4908.
 morphology, *Bombus lapponicus*, *Bombus monticola* 4871.
 morphology, *Braconidae* 7215.
 morphology, *Camacopidae*, *Polypes* 4111.
 morphology, *Carabodes hungaricus* 8053.
 morphology, *Carabus* 8772.
 morphology, *Cayocolum*, Europe 4887.
 morphology, *Centruroides* 8744.
 morphology, *Cephidae*, *Tenthredinidae*, USSR 4102.
 morphology, *Chaetocoelus* 7937.
 morphology, *Chalcidoidea*, Africa 1649.
 morphology, *Charoxys* 6365.
 morphology, *Chloropinae* 2410.
 morphology, *Chrysogramma*, *Sarcotachina* 4840.
 morphology, classification, *Leptotrombidium*, China, People's Rep. 3148.
 morphology, classification systems, Hemibridae 4860.
 morphology, *Coleophoridae* 2221.
 morphology, collections, *Lepismatidae* 4065.
 morphology, collections, *Microcypha* 7242.
 morphology, collections, *Nemouridae* 5608.
 morphology, *Conchaspidae* 2437.
 morphology, *Corosoma*, *Dasychernes* 8742.
 morphology, countries, *Epicauta caucasia*, *Epicauta floydwerneri*, new species.
Epicauta brasiliensis, *Epicauta crura* 2496.
 morphology, *Crocinae*, Africa 1665.
 morphology, developmental genetics, *Aphididae* 2335.
 morphology, developmental stages, *Cliopiera propium* 1672.
 morphology, *Dilardae*, Brazil, Amazon Basin 4055.
 morphology, *Diploschizia*, North America 1659.
 morphology, *Dipterolabia*, Australia 2389.
 morphology, *Diprhis* 4024.
 morphology, distribution, *Glyptopterigidae* 5605.
 morphology, *Eremobates*, USA 1595.
 morphology, *Eremotylus*, *Simphon* 4026.
 morphology, *Eupetrisia* 5597.
 morphology, *Euryura mississippiensis* 4911.
 morphology, females, *Dendrolimus benderi*, India 4739.
 morphology, females, *Psilopocus pulchripennis* 1676.
 morphology, fossils, *Keroplatidae*, *Mycetophoridae*, France 1623.
 morphology, fossils, *Trigona dominicana*, Dominican Republic 6335.
 morphology, *Frankliniella bruneri* 1677.
 morphology, *Friesia*, Mexico 4820.
 morphology, genetic analysis, *Aphelodes marshallii* 5566.
 morphology, genitalia, *Platyperges* 6300.
 morphology, *Geocoroides*, India 7193.
 morphology, geographical distribution, *Acnemis* 6402.
 morphology, geographical distribution, *Aenictus decolor* 38.
 morphology, geographical distribution, *Agra* 4792.
 morphology, geographical distribution, *Ancandella* 6453.
 morphology, geographical distribution, *Ancylolomia*, China, People's Rep. 841.
 morphology, geographical distribution, *Hamaba* 1601.
 morphology, geographical distribution, *Muellianella* 7204.
 morphology, geographical distribution, *Parakanchia*, *Soreutoneura*, New Guinea 837.
 morphology, geographical distribution, *Staphylinidae*, New Guinea 2398.
 morphology, geographical distribution, *Tarsetinae*, New Guinea, Australia 7884.
 morphology, geographical distribution, *Unxia* 6371.
 morphology, *Geometridae*, *Noctuidae* 4894.
 morphology, *Halotantysus tika* 818.
 morphology, *Hastella*, Australia 2473.
 morphology, *Hemiptera*, Australia, Northern Territory 3208.
 morphology, *Hercostomus quadifolius* 6498.
 morphology, *Histienda*, New Guinea 2393.
 morphology, *Homoptera*, Czechoslovakia 3213.
 morphology, host plants, reviews, *Gelechiidae* 4896.
 morphology, hybridization, subspecies, *Euxoa comosa* 3998.
 morphology, hybrids, *Lasius niger*, *Lasius alienus* 3217.
 morphology, *Hybrizon*, *Phaxiommatidae* 1647.
 morphology, *Hydroperla*, Nearctic Region 1673.
 morphology, *Hypodendae* 2383.
 morphology, identification, *Nonarthra cyaneum*, Panama 7126.
 morphology, identification, *Oecetis disjuncta*, *Oecetis avara* 8004.
 morphology, identification, *Pseudomethocha proguqua*, USA, Montana 4295.
 morphology, *Idrnu* 4035.
 morphology, instars, adults, *Pyraustini* 844.
 morphology, *Isercus* 8747.
 morphology, *Iodermis planus*, *Tasmania* 4010.
 morphology, *Jassidae* 6419.
 morphology, keys 4898.
 morphology, keys, *Acampocladius* 4828.
 morphology, keys, *Achryson* 6362.

Taxonomy, (continued)

- morphology, keys, *Anister* 6366.
 morphology, keys, *Ascalaphidae* 4057.
 morphology, keys, *Ascalaphidae*, Brazil, Amazon Basin 4056.
 morphology, keys, *Banasa* 6418.
 morphology, keys, *Blattidae* 7273.
 morphology, keys, *Brucia* 6449.
 morphology, keys, *Calolampra* 4903.
 morphology, keys, *Crepicardus*, Madagascar 4797.
 morphology, keys, *Cureulionidae*, *Rhynchophoridae*, Ogasawara Is. 3979.
 morphology, keys, *Dolophus*, North Africa 4836.
 morphology, keys, *Diplazonidae* 5591.
 morphology, keys, *Dirhinidae*, India 7212.
 morphology, keys, *Dolichovespula sylvestris* 4036.
 morphology, keys, *Encosipilus antefurcalis*, Africa 3219.
 morphology, keys, *Epicypta* 4005.
 morphology, keys, *Forcipomys* 8054.
 morphology, keys, *Frenchia* 3216.
 morphology, keys, geographical distribution, hosts, *Cerocephala rufa*, *Cerocephala*
ecceptogasteri 2459.
 morphology, keys, geographical distribution, *Listrophoridae* 2384.
 morphology, keys, geographical distribution, *Pogonomymex* 7217.
 morphology, keys, *Kaltenbachella* 7197.
 morphology, keys, *Lagurus*, France 8761.
 morphology, keys, *Larinae* 4773.
 morphology, keys, *Lasius*, Asia, Himalayan Mts 5590.
 morphology, keys, *Lecanodiaspis* 6425.
 morphology, keys, *Leucospis*, India 7216.
 morphology, keys, *Macrotomus* 1602.
 morphology, keys, *Micropezidae*, South America, Amazon R. Basin 4830.
 morphology, keys, *Menanus*, India 7161.
 morphology, keys, *Nothocantocera* 3202.
 morphology, keys, *Peltopertidae* 6458.
 morphology, keys, *Planococcus ficus*, *Trionymus lounsburyi* 6514.
 morphology, keys, *Psylliaphagus* 4113.
 morphology, keys, *Rhinotrygnathus* 6351.
 morphology, keys, synonymy, *Tincornus herbarius*, *Tincornus rubiventris*.
Tincornus subgenus, *Tincornus distinctus* 2403.
 morphology, keys, *Trichomyiidae* 5565.
 morphology, keys, *Trypoxylon* 4882.
 morphology, keys, *Unisigalphus* 5594.
 morphology, keys, *Asleborini*, Hawaii 7165.
 morphology, *Laetana* 5561.
 morphology, larvae, *Ischnura gemina* 1667.
 morphology, larvae, keys, *Agabus* 8041.
 morphology, larvae, phylogeny, *Poliposus herculeanus* 5556.
 morphology, *Lignivodes*, Turkey 4802.
 morphology, *Limosina* 2417.
 morphology, *Lithobiidae*, Asia 4069.
 morphology, *Macdonna*, USA, Florida 3207.
 morphology, medical importance, keys, Brazil 3196.
 morphology, *Mesostigmata*, Nigeria 1588.
 morphology, *Michaelinae* 7145.
 morphology, *Monostera* 1636.
 morphology, museum collections, *Scelopendridae* 4068.
 morphology, *Neobidessus*, South America 4811.
 morphology, *Neobaematopus*, *Johnsophorus*, *Luogathodes* 8745.
 morphology, *Neptulidae*, Cyprus 4892.
 morphology, new genera, *Alloclenema* 4886.
 morphology, new genera, *Anthobius*, *Anthomyiidae* 816.
 morphology, new genera, *Astronodes* 2469.
 morphology, new genera, *Nepodanodes* 4827.
 morphology, new species, *Flavicornicolum*, China, People's Rep. 3996.
 morphology, new species, *Neonancorhynchus*, USA, Texas, Padre I. 2381.
 morphology, new genera, new species, *Vellinae* 4014.
 morphology, new genera, *Parabuprestes*, *Sotekia* 7155.
 morphology, new records, *Acarna*, India, Bihar 4765.
 morphology, new records, *Anthomyiidae*, Japan 7177.
 morphology, new records, *Naphellus*, India 7194.
 morphology, new species, *Acanthomytilus hungaricus*, Hungary 2441.
 morphology, new species, *Acanthoscelides compus*, *Acanthoscelides caracalla*,
 Argentina 3186.
 morphology, new species, *Aegialia wimeri*, rare species, *Aegialia petrovitzi*,
 Nepal 21.
 morphology, new species, *Alienates* 2433.
 morphology, new species, *Amblyseius nambourensis*, *Amblyseius fletcheri*, Australia
 799.
 morphology, new species, *Anarsia achrasella*, India 2465.
 morphology, new species, *Arrenurus*, India 2378.
 morphology, new species, *Athenogona*, *Acritochaeta*, India 822.
 morphology, new species, *Certonon*, South America 1646.
 morphology, new species, *Churothrips azoricus*, *Apterygotrips gilvipes*, Azores,
 Canary Islands 849.
 morphology, new species, *Chudalupia meridionalis*, Australia, Western Australia
 2379.
 morphology, new species, *Cononimus* 1597.
 morphology, new species, *Conioperitigidae*, North America 845.
 morphology, new species, *Coretastonomus bifidus* 1581.
 morphology, new species, *Cryptoxilos lymatoris* 2451.
 morphology, new species, *Culicoides*, Panama 3205.
 morphology, new species, *Delia*, China, People's Rep. 820.
 morphology, new species, *Dermaptera* 2406.
 morphology, new species, *Diaperobates crinitus*, *Paracratopia meridionalis*,
 USSR 6341.
 morphology, new species, *Drosophila* filia 1628.
 morphology, new species, *Duculacarus turgescentis*, Indonesia 2387.
 morphology, new species, *Euphyrs* *evae*, *Salticidae*, India 801.
 morphology, new species, *Frankliniella georgiensis*, USA, Georgia 3233.
 morphology, new species, *Gypsona*, Bolivia 2440.
 morphology, new species, *Jenkinshelia*, Asia 3200.
 morphology, new species, *Keyes*, *Vemilia longina* 5.
 morphology, new species, *Lageria orizabensis*, *Impatiens americanum*, Mexico
 4863.
 morphology, new species, *Liviscocephala*, Ivory Coast 1626.
 morphology, new species, *Marasmania patnalis*, Southeast Asia 842.
 morphology, new species, *Microdon abditus*, *Microdon abstrusus*, *Microdon*

Taxonomy, (continued)

- adventitious 2427.
 morphology, new species, *Mycomya ganthalsi*, Panama 1625
 morphology, new species, *Nemoura klapperi*, China, People's Rep 3230
 morphology, new species, *Neoperla*, India 7240
 morphology, new species, new genera, *Austropamphus woodwardi*, *Woodwardothrips gracilis*, Australia 825
 morphology, new species, new genera, *Kesselimyia chandleri*, Czechoslovakia 4003.
 morphology, new species, new genera, *Pocillocoelus longilobus*, Australia 827
 morphology, new species, new genera, *Rhychnaenae*, India 7172
 morphology, new species, new records, *Trichoptera*, Finland 1570
 morphology, new species, *Ophiogomphus acuminatus*, Tennessee 3229
 morphology, new species, pests, *Megastena sandhu*, India 823
 morphology, new species, *Pseudaphysus*, Mexico 2446
 morphology, new species, *Quedius repens*, U.S.A., Oregon 2399
 morphology, new species, *Rhabdipyrus* 3218
 morphology, new species, *Sesiopterus californicus*, North America 2453
 morphology, new species, *sphodrinii*, Nepal 808
 morphology, new species, *Sukunahikona popei*, India 3180.
 morphology, new species, *Teles crassifemur*, *Teles nepauli*, *Teles niger*, *Teles punctiformis*, *Teles tericola*, *Teles villus* 2461.
 morphology, new species, *Trichogramma evanescens* 2455.
 morphology, new species, *Trichogramma julianoi*, U.S.A., New York 4867.
 morphology, new species, *Trisetacus abietivagans*, *Eriophyes chibanaensis*, Japan 3170.
 morphology, new species, *Vaghiha blascoi*, India 2380.
 morphology, new taxa, *Desmarchia* 3188.
 morphology, new taxa, *Macropis* 3212.
 morphology, nomenclature lectotypes, *Alysius communis* 7980
 morphology, *Notochaeta bufoinivora*, *Emblemasona erro*, America 4926
 morphology, *Notodontidae*, Africa 4039
 morphology, *ocelli*, *Isometopus* 5579
 morphology, *Odontodraeus* 5548
 morphology, *Odiobretuniae*, Madagascar 543
 morphology, *Oreodonta albertae* 8792
 morphology (organisms), new species, *Edwardsina confusa*, Australia, New South Wales 3193.
 morphology, *Pachymerinae*, Brazil 6374.
 morphology, panoploid complex, evolution, *Panorpidia* 1592
 morphology, *Paragnetes* 6256
 morphology, *Parandina* 6172
 morphology, *Pensopinae*, Antilles 5806
 morphology, pest outbreaks, *Pulvinaria iceryi*, Mauritius 3820
 morphology, petiole lateral area, *Aphidius frumentatus* 7271
 morphology, *Pherbellia*, North America 5205
 morphology, *Pherbina coryleti*, *Pherbina intermedia*, *Pherbina mediterranea*, *Pherbina testacea* 6323
 morphology, *Philetaridae*, East Africa 4063
 morphology, phylogeny, distribution, *Agra* 4793
 morphology, phylogeny, *luridae* 5554
 morphology, phylogeny, *Megacanthus* 7202.
 morphology, phylogeny, *Metholobus* 3185.
 morphology, *Pleurophorus pannonicus* 8764
 morphology, *Proctotrupidae* 4020
 morphology, *Pseudodictyonocentrus circulatorius*, *Pseudodictyonocentrus christianseni*, new genera 3191
 morphology, *Pseudea*, New Guinea 3332
 morphology, *Pucoptera*, Costa Rica 6460
 morphology, *Psychodoptera*, *quiquemvatus*, *quiquemvatus*, *Psychodopterus squamiventus*, *mauritanus*, Brazil, Amazonia 5573
 morphology, *Ptilonera bidorsalis* 6507
 morphology, rare species, *Platybunus strigosus*, *Platybuninae*, *Metaplatybus hypanicus*, *Zacheus macrinus* 15.
 morphology, *Saissetia hemisphaerica* 9095
 morphology, sense organs, *Tingidae* 4965.
 morphology, *Sepsis*, Italy 3998.
 morphology, *setae*, *larvae*, *pupae*, *Cermotina spicata* 1678.
 morphology, *Shistocerca americana* 2470.
 morphology, *Simulidae* 3995.
 morphology, *Sisyridae*, Brazil, Amazon Basin 4054.
 morphology, social behavior, *Dorylinia* 5425
 morphology, species composition, *Trichoptera*, Australia, Southwest 7244.
 morphology, *Staphylinidae* 3181.
 morphology, *Staphylinidae*, Asia 4812.
 morphology, *Staphylinidae*, Galapagos Islands 1611.
 morphology, status, *Dendrocerus solari* 7211.
 morphology, surveys, *Braconidae*, Tunisia 2449.
 morphology, surveys, *Pseudochorutinae*, Brazil 4745
 morphology, surveys, *Tingidae*, Gambia, Senegal 4012
 morphology, *Symphyla*, Sri Lanka 5598.
 morphology, synonymy, *Brachycephalus*, *Dysmuscus* 3236.
 morphology, synonymy, *Depressaria* 7225.
 morphology, synonymy, *Epicauta* 5562.
 morphology, synonymy, *Ichneumonidae* 4870.
 morphology, synonymy, *Misolampidius elevicrus*, *Misolampidius okumurai* 8773.
 morphology, synonymy, *Sciomyzidae* 4825
 morphology, synonymy, *Synemomyia bicolor*, *Synemomyia americana* 5547
 morphology, synonymy, *Tingis* 4855.
 morphology, systematics, *Orsodacne*, *Syneta* 2394.
 morphology, *Tabanus sulcifrons* 28.
 morphology, *Taeniaptera*, Brazil 3992.
 morphology, *Tetracyclus boreus* 2452.
 morphology, *Thalaina*, *Thalainodes*, *Macqueenia*, new species, *Thalaina kimba*, New South Wales 3232.
 morphology, *Theraphosidae*, Costa Rica 3173.
 morphology, *Tineidae* 4053.
 morphology, *Tingidae*, Africa 1633.
 morphology, *Triatoma*, Cuba 5536.
 morphology, *Trichocyllia* 3975.
 morphology, *Trichoptera* 4868
 morphology, *Trybiographa* 4879.
 morphology, *Trypoxylon*, *Fornosa* 4884.
 morphology, *Trypoxylon tenotidius*, *Lepidophora trypoxylon* 2414.
 morphology, *Trybius haematopus* 6303.
 morphology, types, *Salicidae* 8752.
 morphology, types, *Trechus distigma* 8762.

Taxonomy, (continued)

- morphology, *Urolyta*, geographical distribution 2401.
 morphology, variation, nodules, sensors, abdomen, *Tingidae* 8885.
 morphology, wings, *Bruchidae* 7166
 morphology, wings, hamuli, *Brachinae* 7277.
 morphology, *Xolaligidae* 2382
 morphology, 9 new species, *Cochlochla* 8803.
 new genera, *Halechius*, U.S.A., Arizona, Mexico 4784.
 new genera, *Hyletus*, *Lacovyletus*, Australia 4749.
 new genera, morphology, *Archethraulodes*, *Demoulinellus*, *Rhigotopus*, *Secochela*, South America 7976.
 new genera, morphology, *Cnethocymatidae*, Australia 4748.
 new genera, morphology, *Cosmozercus*, *Parhozeron*, USA 4.
 new genera, morphology, *Dryocba*, *Zonocba*, Europe 4935.
 new genera, morphology, geographical distribution, *Neoqueumaspis*, East Asia 1643.
 new genera, morphology, *Johnbellina* 6400.
 new genera, morphology, *Minymischa* 6441.
 new genera, morphology, *Neoaenopsalbia judithae*, Sri Lanka 7132.
 new genera, morphology, *Neocampacopalpus* 4111.
 new genera, morphology, *Spilrotaroides*, Africa 7938.
 new genera, morphology, *Xestodion*, Neotropical Region 4776.
 new genera, morphology, *Xylotopus*, Nearctic Region 3994.
 new genera, new species, *Aleurodiphys americanus*, morphology, keys, *Apbelimidae*, *Aspidiotiphagus* 2456.
 new genera, new species, *Caladomyia*, South America, Amazon R. 4838.
 new genera, new species, *Diptilobryncus*, *Diptilobryncus sinuatus*, *Rhynchophytus*, *shorocala*, India, West Bengal 8714.
 new genera, new species, *Leptophebidae*, South America 5575.
 new genera, new species, *Margarodesia desmieri*, Ivory Coast 1791.
 new genera, new species, morphology, *Agekanella koponeni*, USSR, Abkhazia 6429.
 new genera, new species, morphology, *Aradidae*, India 4859.
 new genera, new species, morphology, *Carcinophoridae*, Ecuador 5563.
 new genera, new species, morphology, *Edovum putteri*, Colombia 2454.
 new genera, new species, morphology, *Hadzhibelya physococi*, USSR, Georgia 6440.
 new genera, new species, morphology, *Misotropis mendocinica*, Brazil 6354.
 new genera, new species, morphology, *Octostigma herbivora*, Tonga 6388.
 new genera, new species, morphology, *Orobittacus obscurus*, U.S.A., California 6450.
 new genera, new species, morphology, *Paracrepidipis wilkeyi* 1644.
 new genera, new species, morphology, *Psychopsis phalaris*, Ecuador 835.
 new genera, new species, morphology, *Murphyella aliquidantia*, *Timbocoris paululus*, Singapore 8802.
 new genera, new species, *Ocinocampa falceps*, Spain, Santander, Tresviso 4824.
 new genera, new species, *Tingidae*, Africa 4856.
 new genera, new species, *Woldana*, *Woldana campana*, Panama 2439.
 new genera, new species, *Zaherizetes africanus* 6350.
 new genera, *Nidurina* 7974
 new genera, systematics, *Ehora plana*, *Elsicella* 2434.
 new records, *Cixiidae*, Papua New Guinea, New Caledonia 8800.
 new species, *Acromopolynema sema*, *Acromopolynema miamseni*, *Acromopolynema uma*, *Acromopolynema immaculatum*, North America 2457.
 new species, *Aesalis imanshili*, Taiwan 8776.
 new species, *Anthaxia aradina*, *Anthaxia brodskyi*, Crete 8760.
 new species, *Aradidae*, China, People's Rep. 4008.
 new species, *Aradidae*, Mexico 31.
 new species, *Archilestes latalatus*, Central America 1666.
 new species, *Arthromelus rossii*, Kenya 1605.
 new species, association, crop fields, *Tetranychidae*, India 8716.
 new species, *Atractomys*, China, People's Rep. 2475.
 new species, *Austrocercella columba*, Australia, Tasmania 2476.
 new species, *Axonopsis quadrangulata*, Spain 13.
 new species, *Bacriola minuscula*, *Hebestola brasiliensis*, *Pseudogiosotola reichardt*, Brazil 6363.
 new species, *Basilobella parvata*, Japan 8.
 new species, biogeography, *Rhagmatophila ausseini* 4048
 new species, bionomics, *Phryganeus pinto*, Spain 8763.
 new species, *Blattella asahinai*, morphology 804.
 new species, *Bombylius californicus*, *Bombylius hali*, *Bombylius valiculus*, synonymy, *Bombylius heximaculatus*, *Bombylius albicaulis*, morphology, keys 1622.
 new species, *Calanomyia alterniflorae*, North America 3204.
 new species, *Carabomyia andreas*, Australia, Victoria 2405.
 new species, *Carpellinus graciliformis* 14.
 new species, *Catanopinae*, China, People's Rep. 847.
 new species, *Cephaleta hayati*, India 2462.
 new species, *Ceratopogonidae*, China, People's Rep. 1575.
 new species, *Ceratopogonidae*, South Africa, Transvaal 8796.
 new species, *Chalcidoides*, Mascarene Is., Reunion I. 4877.
 new species, *Coccus elatensis*, Israel 2442.
 new species, *Coenosis sublavicornis*, China, People's Rep. 2411.
 new species, *Compteromeres oceanensis*, U.S.A., South Carolina 3194.
 new species, *Coryphus aquilus*, South America, Amazon R. 3206.
 new species, *Cryptocryptes minchami*, Australia, South Australia 2673.
 new species, *Culex tiapingsensis*, China, People's Rep., *Tiapingshan* 2423.
 new species, *Culicoides schrankei*, *Culicoides krombeini*, Sri Lanka 2413.
 new species, *Deltoccephalus*, South America 5587.
 new species, *Densimeria martini*, Borneo 23.
 new species, *Depressaria nemolella*, *Pseudamelia elae*, *Mompha complexa*, Europe 7997
 new species, *Dichromyia sapodilla*, *Dichromyia manikara*, U.S.A., Florida 1660.
 new species, *Dicranocentrus*, Ivory Coast 3190.
 new species, *Dicrodiplosis nanhoti*, Africa 1624.
 new species, *Dixa pseudindiana*, U.S.A., Minnesota 2416.
 new species, *Dixella nixiae*, Honduras 29.
 new species, *Drosophila brahmagiriensis*, *Drosophila bhagamandalensis*, India 7174.
 new species, *Drosophila moana*, Australia, Torres Strait 3953.
 new species, *Drusus noncus*, Austria, Carinthia Mts. 3235.
 10 new species, *Epitranus*, India 8816.
 new species, *Euthytira xinyuanensis*, China, People's Rep. 2474.
 new species, fossils, *Elektraphis lindrothi*, Tertiary 792.
 new species, *Frontopsylla tuoliensis*, China, People's Rep. 44.
 new species, geographical distribution, marine environment, *Agave verrucosa*, *Agave hortellus* 3966.
 new species, *Goniozus collessi*, *Goniozus mandibulatus*, *Goniozus jactatus* 833.
 new species, *Gypona meitana*, *Gypona rubrunara*, *Gypona decora*, *Gypona quadra*, *Gypona mocamba*, *Gypona platona*, *Gypona colomela* 2444
 new species, *Himalotrechodes insignis*, Nepal 17
 new species, *Himeunka bana*, *Himeunka chibana* 4018.

Subject Index

Taxonomy. (continued)

new species, Histeridae 3768.
15 new species, Holotrichus, South America 1958.
new species, house dust, Dermatophagoides siboney, Cuba 3970.
new species, Hydra annectens, Hydra lenta, geographical distribution, new records, South America 3167.
new species, Hypogococcus pungens, Argentina 1639.
new species, Inveia, USA, Texas 3221.
new species, Ischnopygulus shanensis, China, People's Rep. 43.
new species, Ixodes 3974.
new species, Ixodes matopi, Zimbabwe 12.
new species, Kermes telini, Kermes pruni 1638.
new species, keys, Pteropera, Africa 3975.
new species, Labidostomoides vialeae, Labidostomidae coriacum, Corsica 4454.
new species, Laccobius 805.
new species, Leucospis mackerrasi, Australia 2458.
new species, Leodonotenus curticaudatus, Endonotenus illiesi, Habritoides perardus, Antiposotomus glaber 37.
new species, Lygaosoma, China, People's Rep. 824.
new species, Megaselia carola, Megaselia lanata, Megaselia rotunda, Megaselia unguolata, North America 2415.
new species, Mesaphorura hylophila, Mesaphorura jarmale, Mesaphorura juri 8778.
new species, Mezira smithi, Aradus denticulatus, USA, Georgia, Philippines 8810.
new species, Microdysus, Nepal 18.
new species, Mitopus ericatus, British Isles 8740.
new species, morphology 810.
new species, morphology, Acanthophthirus capacini, Turkey 5545.
new species, morphology, Acanthoscelides devriesi, Acanthoscelides pigricola, Acanthoscelides zebratus 7162.
new species, morphology, Acanthoscelides 8794.
new species, morphology, Adamysius concaui, Pakistan 7150.
new species, morphology, Aedes kesseli, Tonga 6406.
new species, morphology, Aeschna moon, Zambia 7236.
new species, morphology, Afronurus subflavus, Ephemerysthus dissimilimus, Caenomedes magnipilosa, Caenomedes infelix, Zaire 6413.
new species, morphology, Afrotrophica selleni, Kenya, Tanzania 7246.
new species, morphology, Afrotrombicula gabonica, Afrotrombicula vaubreci, Trombiculidae, Gabon 798.
new species, morphology, Agabus apache, USA, Arizona 4799.
new species, morphology, Agetocera sokolovi, Vietnam 6383.
new species, morphology, Albiatopus hantsiensis, Haiti 8799.
new species, morphology, Albiatopus vastensis, Dipodopa, Iran 851.
new species, morphology, Alcesis, Brazil 3214.
new species, morphology, Allopauporus fiejlbegi, Allopauporus seychellius, Allopauporus mabeicus, Allopauporus extenuatus, Allopauporus quadridentatus, Allopauporus acutilinguis, Cauvetoporus proprius, Cauvetoporus clavistylus, Seychelles 7245.
new species, morphology, Alluaudomyia fuscicornis, Stilobezzia ensistyle, India 4000.
new species, morphology, Alluaudomyia variegata, USA, Southeast 7968.
new species, morphology, Alticinae, China, People's Rep. 6322.
new species, morphology, Alticinae, India 7160.
new species, morphology, Amblyseius alpica, Amblyseius liturivorus, Japan, Henshu 7135.
new species, morphology, Amblyseius cherti, Asia 8725.
new species, morphology, Ammophila silvestris, USA, West 6442.
new species, morphology, Anagrus abdel rassouli, Iraq 6434.
new species, morphology, Anapleus jelineki, Anapleus wealkai 8753.
11 new species, morphology, Anastrepha, Brazil 8788.
new species, morphology, Anastrepha reichardi, Venezuela, Anastrepha tecta, Peru 8790.
new species, morphology, Anchylorhynchus bicarinatus 1614.
new species, morphology, Androlaelaps capromydis, Ornithonyssus garroidi, Cuba 8720.
new species, morphology, Aniarella ferracini, Phylloptera verruculosa, Paracora maeformosa, Italy 6465.
new species, morphology, Anisops ayeayi, Australia, Northern Territory 5580.
new species, morphology, Anomalohalacarus litorealis, USA, Halacaroides angustus, Halacaroides breviculatus, Chile, Strates of Magellan 7147.
new species, morphology, Antaeus hoguei, Mexico, Socorro Island 1607.
new species, morphology, Anthidium berbericum, Royanthidium bicoloripennis, Morocco 7210.
new species, morphology, Anthoctopys glycosim, Cosella ichnocarpasia, Epiceidophyes clerdendri, India 7138.
new species, morphology, Anthribidae, Africa, Madagascar, Philippines, Brazil 7942.
new species, morphology, Antoinella gignoi, Laemostenus peloponnesiacus, Laemostenus thesalicus, Troglodanum novaecheimiae 4814.
new species, morphology, Anuraphis himalayensis, India 7208.
new species, morphology, Aphidiotus hungaricus, Hungary 7967.
new species, morphology, Aphodius murensis, Aphodius khandui, Aphodius pokharenis, Nepal, Himalayas 20.
new species, morphology, Apomychus taishanica, China, People's Rep. 3972.
new species, morphology, Aradidae, Central America 7978.
new species, morphology, Arachnionchus stovesschei, Canada, Ontario 5546.
new species, morphology, Argyresthia norbellei, Epinotia brunniciana, Crambus encellus, Thra albionata, Hungary 7995.
new species, morphology, Aridulus sinensis, China, People's Rep. 4023.
new species, morphology, Armonium hoblandi, Zaire 4011.
new species, morphology, Aschochaenogaster dandrea, USSR, Russia 7146.
new species, morphology, Asitidae, India 7184.
new species, morphology, Asolus lodosi, Telonotenus turcicus, Turkey 7989.
new species, morphology, asterolecanii-group, 26 species, Metaphycus, South Africa 4874.
new species, morphology, Athergona, Africa 5567.
new species, morphology, Atheta ehstrenu, Sweden 4777.
new species, morphology, Atholus lamourensi, USSR, Armenia 8766.
new species, morphology, Atomotus louisiana, USA, Louisiana 7228.
new species, morphology, Baecocercus Sulawesi 5555.
new species, morphology, Baetis chantaensis, USSR, Kazakhstan 7190.
new species, morphology, Bakerdania kielczewski, Petaloniema rackae, Imparipis comatosissim, Imparipis parpicolossim, Scuticarus myrmecophilus, Scuticarus submicrostilis, Poland 4761.
new species, morphology, Bakerius amazonicus, Bakerius maculatus, South America, Amazon R Basin 4862.
new species, morphology, Balclutha woldai, Panama 6422.

Taxonomy, (continued)

new species, morphology. *Barchenia caucasica*, USSR, Caucasus Mts 6397.
new species, morphology. *Barytus hartmanni*, Panama 7950.
new species, morphology. *Baryconus dudichi*, Philippines, *Baryconus gallego*, Costa Rica 7986.
new species, morphology. *Bezeilus taxoides* 7955.
new species, morphology. *Belotus acutipennis*, *Belotus maculatus platonensis*, Brazil 6370.
new species, morphology. *Bembix inyoensis*, USA, California 6431.
new species, morphology. *Benbowia elisabethae*, Sumatra 4042.
new species, morphology. *Bocharia shirleyanae*, USA, Texas 3171.
7 new species, morphology. *Brachyanus* 7189.
new species, morphology. *Brachylophypa decorata*, Sulawesi 8811.
new species, morphology. *Brachyopogon krasai*, Brachyopogon tokunagai, *Dasyhelea fortieri*, Solomon Is 7176.
new species, morphology. *Brasiliianus glaberimus*, *Brasiliianus intermedius*, Brazil, *Brasiliianus fraterculus*, Paraguay 8752.
new species, morphology. *Caledonopoma papuana*, New Guinea 4806.
new species, morphology. *Campephiloscopes atoyei*, *Campephiloscopes paraguayensis*, South America 7144.
new species, morphology. *Caradabea*, Asia 3984.
new species, morphology. *Caradabea*, Nepal 4798.
new species, morphology. *Campephiloscopes zarensis*, Zaire 8767.
new species, morphology. *Cataglyphis sabulosus*, Israel 8831.
new species, morphology. *Centaplys mahunkorum*, *Paraplys ahenus*, West Indies, Saint Lucia 4823.
new species, morphology. *Ceraleudorus ducker*, Brazil 4015.
new species, morphology. *Chaetoporus diversisetosus*, Poland 8815.
new species, morphology. *Chaulopus horizontalis*, China, People's Rep 4009.
new species, morphology. *Chazara rangontavica*, USSR, Tadzhikistan 7234.
new species, morphology. *Chionanthobus darlingtoni*, Cuba 1606.
new species, morphology. *Chloebus zurempeli*, *Macroctarus polylineatus*, Siberia, Karakum, Apion amudariense, USSR, USSR 4796.
new species, morphology. *Chrysomella tobiasi*, USSR, Uzbekistan 6428.
new species, morphology. *Cicadellidae*, South America 7982.
new species, morphology. *Cinara chaetovirata*, India, Simla 1642.
new species, morphology. *Claracea crassula*, *Strongylophthalmyia rancornis*, USSR 6195.
new species, morphology. *Claudiavina miranda*, *Monelata incispennis*, Basalys, 6 species, India, Sri Lanka 4863.
new species, morphology. *Clavelloneis besounovi*, USSR, Turkmenistan 8823.
new species, morphology. *Colaspis chapalensis*, Mexico, Jalisco 8769.
new species, morphology. color. *Bourletella gibbosa*, USA, South Carolina 1620.
new species, morphology. *Colorado velda*, USA, California, San Bernardino Mts 6447.
new species, morphology. *Composcorer deceptor*, *Parameocorer stacionosus*, Brazil 6364.
new species, morphology. *Conocore parva*, Africa, South 4900.
new species, morphology. *Conoapteryx latistylus*, *Conoapteryx ceylonica*, Sri Lanka 4901.
new species, morphology. *Conothelus ocellatus*, *Conothelus zayasi* 8750.
new species, morphology. *Copodognathus*, Argentine 8818.
new species, morphology. *Corbula lena*, Peru 8806.
new species, morphology. *Corticea ibérica*, Spain, Portugal 5576.
new species, morphology. *Corticea seeveri*, Brazil 6377.
new species, morphology. *Cosmopterixa panochensis*, USA, California 6384.
new species, morphology. *Cosmoxethonus bhutanensis*, India, Bhutan 6346.
new species, morphology. *Costa Rica*, *Epilampra in olivaceus*, *Epilampra belli*, *Epilampra unistata*, *Epilampra rothi* 2471.
new species, morphology. *Cricotopus zavrelli*, Poland 4837.
new species, morphology. *Crocotus perna*, Iran 6438.
new species, morphology. *Crocotus*, *Crocotus*, British Isles 5593.
new species, morphology. *Culicoides*, Colombia 812.
new species, morphology. *Culicoides*, South America 4844.
28 new species, morphology. *Curtaria*, South America, Central America 7200.
new species, morphology. *Cydia largo* 7224.
new species, morphology. *Cyphon simplex*, Iran 3978.
new species, morphology. *Dacus opilae*, Australia 821.
new species, morphology. *Deinophobus sheila*, *Deinophobus hirsutus* 4800.
new species, morphology. *Deltoistethus scitulus*, Mexico 3980.
new species, morphology. *Demodex* 7140.
new species, morphology. *Derovatellus hancocki* 1615.
new species, morphology. *Derovatellus hancocki*, Uganda 4781.
new species, morphology. *Derovatellus onorei*, Congo, People's Rep. 7163.
new species, morphology. *Desmophora*, Iran, USA, Florida 4791.
new species, morphology. *Desmophora sajania*, Mongolia 1629.
new species, morphology. *Dicranocera*, Nepal 6387.
new species, morphology. *Dicranota flammata*, *Dicranota chandeligeri*, Europe 6403.
new species, morphology. *Dicytoma christinae*, Poland 8780.
new species, morphology. *Dilophus neglectus*, Europe 7182.
new species, morphology. *Diplaxia*, Iran, USSR, binzi 4031.
new species, morphology. *Dirla pulleni*, New Guinea 4910.
new species, morphology. *Discochorea dodong*, Philippines, Negros I 4889.
new species, morphology. *Drosophila dominici*, India, Darjeeling 8795.
new species, morphology. *Drosophila neokurukawa*, India 7175.
new species, morphology. *Drymus armasi*, *Drymus spectata*, Cuba 8732.
new species, morphology. *Dysaphis sharmai*, Nepal 7191.
new species, morphology. *Ecdynurus samalorum*, Czechoslovakia 8798.
new species, morphology. *Ecdyonurus resali*, *Rhithrogena theisclingeri*, Turkey, Iran 4006.
new species, morphology. *Ectopora leechi*, USA 4788.
new species, morphology. *Elatonotera phouate*, *Mesocneme dupuyi*, Senegal 7999.
new species, morphology. *Elongeuma speophium*, USSR 8843.
new species, morphology. *Encarsia minor*, *Encarsia abatei*, *Eretrococcus cadabae*, Iran 4881.
new species, morphology. *Encyrtus aequius*, *Encyrtus melas*, South Africa 8824.
new species, morphology. *Endomychidae*, Asia 7169.
new species, morphology. *Enoplognatha latimana*, *Enoplognatha penelope* 7152.
new species, morphology. *Epanerchodus polymorphus*, USSR 6464.
new species, morphology. *Erieydus beneficus*, India 7207.
new species, morphology. *Eriophyidae*, India 7133.
new species, morphology. *Eseneckia biclucula*, *Eseneckia hirsutipalpis*, Mexico 7965.
new species, morphology. *Eupelops longistopus*, India, Darjeeling 6349.
new species, morphology. *Euthecia expallida*, Finland 7220.

Taxonomy, (continued)

- new species, morphology, *Eurytoma palustris*, *Eurytoma scabriterga*, *Eurytoma antistrophii*, *Eurytoma euneiforma*, *Eurytoma strigosa*, *Eurytoma orbiculus*, North America 8825
- new species, morphology, *Euthima Wendtiae*, Peru, *Euthima araujoii*, *Cylicasta chionea*, Brazil, *Heyshebytoma punctata*, *Buicides erichsoni*, Ecuador 8758
- new species, morphology, *Euxoa castanea*, *Euxoa inscripta* 8839
- new species, morphology, *Euxoa gadualensis*, *Euxoa occidentalis* 7996
- new species, morphology, *Exalcidion tetracanthum*, Peru 4780
- new species, morphology, *Falsamblesitha ibyara*, Brazil 6357
- new species, morphology, *Fania stigi*, Scandinavia 7971
- new species, morphology, *Fergusonia svyzgu*, India 4831
- new species, morphology, *Filistata benghali*, Mexico 8733
- new species, morphology, *Fnesia albithorax*, *Odontella jeremiei*, Lesser Antilles 6386
- new species, morphology, *Fnesia hoffmannorum*, Mexico, Morelos 8781
- new species, morphology, *Gabonia gabriela*, Kenya 3987
- new species, morphology, *Galedonta cornuta*, *Galedonta rotundicornis*, Brazil 5582
- new species, morphology, *Galunna zachvatkini*, USSR 6348
- new species, morphology, *Gambialoa edromai*, *Gambialoa lufuyi*, *Gambialoa hibiscii*, *Lublinia acaciae*, *Lublinia katookensis*, *Empoasca katunguna*, *Empoasca katunguna* ugandana, Uganda, Rwenzori Natl Park 7203
- new species, morphology, *Gampsocleis ruyukensis*, Ruy-kyu Is 7238
- new species, morphology, *genitalia*, *Cyrtopogon sabroskyi*, USA, Wyoming 2421
- new species, morphology, geographical distribution, *Cacis candida*, Canada 1577
- new species, morphology, *Gera schmidtii*, Thailand 8005
- new species, morphology, *Gonatocerus sarawakensis*, *Polynema robusta*, Malaysia 4037
- new species, morphology, *Gongronemus ignota*, *Gongronemus peruviana*, *Gongronemus veta*, Peru, Brazil 6454
- new species, morphology, *Gonolabis bidens*, *Gonolabis gleisi*, *Gonolabis dentata*, Australasian Region 7959
- new species, morphology, *Gretchenia obsoletana*, USA, California 7993
- new species, morphology, *Gripostegia*, *Gripostegia*, Australia 5609
- new species, morphology, *Guanelia nematocera*, *Guanelia pilosa*, *Guanelia trimaculata*, *Guanelia tuberculifrons*, Panama 4858
- new species, morphology, *Gyponana fortuna*, *Gyponana boquetiae*, *Gyponana chiriquae*, *Gyponana impeta*, Panama, Mexico 4017
- new species, morphology, *Gyponata*, *Gyponata*, South America 7984
- new species, morphology, *habasi*, *Nimblea pinderi*, USA, Southeast 4845
- new species, morphology, *Habropogon capensis*, *Hermannomyia oldroydi*, *Lesotho*, South Africa 4832
- new species, morphology, *Halacarus*, Atlantic Ocean 6343
- new species, morphology, *Halidayia exserta*, *Halidayia asymmetrica* 7972
- new species, morphology, *Haplacaricus pandanus*, *Microesia*, Yap I. 3965
- new species, morphology, *Haplacaricus pandanus*, *Microesia*, Yap I. 8717
- new species, morphology, *Hemuleuca mae peiglen*, USA, Texas 6446
- new species, morphology, *Hetaena mendezi*, Argentina, Misiones, Iguaçu 6452
- new species, morphology, *Heterarthrus umbrosensis*, *Cladarris cretica*, *Pristiphora cretica*, Crete 6427
- new species, morphology, *Heteroleptus spinosus*, Borneo 4013
- new species, morphology, *Hyalinodorus elongatus*, Colombia 4849
- new species, morphology, *Hyalomyzus mitchellensis*, USA, North Carolina 5589
- new species, morphology, *Hydrochara sumula*, USA, Wisconsin 4819
- new species, morphology, *Hydrophorus boreus*, North America 4774
- new species, morphology, *Hylobius pontis*, Brazil 4801
- new species, morphology, *Hyperephrus proenisi*, *Schoenfeldiopsis zikani*, new species, *Schoenfeldiopsis zikani* 7157
- new species, morphology, *Hypopora expansa*, *Hypopora serrata*, *Hypopora capitulata*, Brazil, Minas Gerais 6420
- new species, morphology, *Hypotites himalayensis*, India 3172
- new species, morphology, *Iguanoides lucidus*, *Paraluederwaldia carasmachii*, Brazil 8738
- new species, morphology, *Isodorus dakshini*, India, Kerala 7159
- new species, morphology, *Isometrus besachei*, *Isometrus acanthinus loebli*, Ceylon 4770
- new species, morphology, *Italoichrysa lobini*, *Anisochrysa teirensis*, Suaruis piresi, Cape Verde Islands 4059
- new species, morphology, *Johnstonimyia bezzii*, *Johnstonimyia gressitti*, Australasian Region 4841
- new species, morphology, keys, *Austrozetes monteithi*, *Austrozetes*, Australia 826
- new species, morphology, keys, *Rhagoletrypa uniformis*, USA, Texas 2420
- new species, morphology, *Knigthonia nigroscutella*, Peru 4849
- new species, morphology, *Kobuzo multiuberculata*, India, West Bengal 1613
- new species, morphology, *Kruia chrysopella*, Africa 6356
- new species, morphology, *Labioplicidia cepula*, USA, Texas 5586
- new species, morphology, *Lagynodes obscurus* 7214
- new species, morphology, *Lamoria hemi*, India 1663
- new species, morphology, larvae, pupae, *Simulium patziensis*, Guatemala 1631
- new species, morphology, *Leioleptum sadonei*, Japan, Sado I. 7154
- new species, morphology, *Leptocera digita*, Bulgaria 8785
- new species, morphology, *Lestrimelitta guyanensis*, *Trigona savannensis*, French Guiana 3220
- new species, morphology, *Leucodryinus samiatum*, North America, West 8821
- new species, morphology, *Leucophaea phosphocapella*, New Guinea 4897
- new species, morphology, *Leuctra szczytkoi*, USA, Louisiana 1675
- new species, morphology, life cycle, *Rhipicephalus zambeziensis*, Africa 2377
- new species, morphology, *Liophilus unio*, USA, Alaska 5551
- new species, morphology, *Lissonoschema macrocolus*, Brazil 6367
- new species, morphology, *Listriophorus beaumonti*, *Listriophorus myops*, *Listriophorus nitor*, *Listriophorus rarus*, *Listriophorus serratus*, *Listriophorus specialis*, *Listriophorus typicus*, Neotropical Region 8756
- new species, morphology, *Lojus asperus*, Ecuador 7985
- new species, morphology, *Lutzomyia pennii*, Brazil, Central Amazon Region 7188
- new species, morphology, *Macronalobius belemensis*, Brazil 7941
- new species, morphology, *Macropsinae*, India 4861
- new species, morphology, *Magaselia cokeri*, Hong Kong 7181
- new species, morphology, males, *Pirata* 802
- new species, morphology, *Megaselia argiopephaga* 7966
- new species, morphology, *Meoneura moraviae*, Czechoslovakia 6872
- new species, morphology, *Metricia thyraxae*, Chile 7249
- new species, morphology, *Micreremus subglaber*, Japan 5519
- new species, morphology, *Microlepidoptera*, Norfolk I. 4041
- new species, morphology, *Microtrombula tanzaniae*, *Whartonia novemsetosa*,

Taxonomy, (continued)

- Tanzania* 6344
- new species, morphology, *Misagna*, Venezuela 3228
- new species, morphology, *Mitostynum vockerthi*, Canada, New Brunswick 7935
- new species, morphology, *Mochlonyx triangularis* 8791
- new species, morphology, *Monrosia impai*, Brazil 6369
- new species, morphology, *Monrosia sulcata*, Brazil 6358
- new species, morphology, *Montethostolus gentilis*, New Caledonia 6417
- new species, morphology, *Myapex acutus*, Chile 7178
- new species, morphology, *Myconia goethalsi*, Panama, Barro Colorado 4833
- new species, morphology, *Myrmica schencki starki*, *Tetramorium ferox*, *Tetramorium armatum*, *Proformica jacobii*, *Myrmica*, People's Rep. 8678
- new species, morphology, *Nanorchestes*, Ecuador 8721
- new species, morphology, *Nanorchestes collinus*, *Nanorchestes gilli*, *Nanorchestes jodiae*, *Nanorchestes lanoi*, Arctic 3963
- new species, morphology, *Nanorchestes wilbanksi*, Antarctica, Marie Byrd Land 7148
- new species, morphology, *Napodytes boki*, Ecuador 6355
- new species, morphology, *Nasutitermes acangussu*, Brazil 8834
- new species, morphology, *Neasterocoris spangleri*, Ecuador 6415
- new species, morphology, *Nemobrenthus becheyni*, *Nemobrenthus pereira*, Brazil 8755
- new species, morphology, *Neoradello inyanganii*, Zimbabwe 8789
- new species, morphology, *Neomphera tuomikoski*, Finland 7961
- new species, morphology, *Neophantacus mallotus*, India 7141
- new species, morphology, *Nephapis bicolor*, *Nephapis namolica* 5560
- new species, morphology, *Nepitula hexapetalae*, *Nepitula szoezi*, *Bedellia ebickella*, *Paronis szoezi*, *Trifurcula gozmanyi*, Hungary, Budapest 8677
- new species, morphology, *Neuroctenus termiophilus*, Pakistan 5577
- new species, morphology, new records, *Hilipinus nearcticus*, new species 4811
- new species, morphology, *Niphanolea bannae*, Thailand 7187
- new species, morphology, *Niphocephus aboriginis*, *Proteramaeus macleani*, *Aspermaeus longipilus*, USSR 7933
- new species, morphology, *Niphogenia* 6399
- new species, morphology, *Nocticanace taprobane*, Sri Lanka 7962
- new species, morphology, *Nocticanaci sinaiensis*, Israel 4834
- new species, morphology, *Nodopus tibialis*, North America 7951
- new species, morphology, *Nomada*, Turkey 4028
- 12 new species, morphology, *Nothopodidae*, India 7136
- new species, morphology, *Notox*, *Notox* bihawanensis, Tanzania 3982
- new species, morphology, *Ochthebius ineditus* 5559
- new species, morphology, *Oedignatha campensis*, Brazil 8735
- new species, morphology, *Oedoporena minor*, Japan 7185
- new species, morphology, *Oligella nana*, *Oligella intermedia*, Sweden 3977
- new species, morphology, *Oligonychus senegalensis*, Senegal 8713
- new species, morphology, *Oppia gatica*, *Oppiella distincta*, *Urumbambates romanicus* 3
- new species, morphology, *Oribatida*, Greece 7142
- new species, morphology, *Ornithomya rupe*, Switzerland, Gibraltar 6405
- new species, morphology, *Orthognathomeres insignis*, Brazil 6443
- new species, morphology, *Oxyethira dunbartonensis*, *Oxyethira sinisinsigne*, *Oxyethira leonensis*, USA 850
- new species, morphology, *Pachybrahis alpinus*, France 8765
- new species, morphology, *Pacifialus imbricatus*, *Anaulaculus golovatchi*, USSR 6465
- new species, morphology, *Pagelmis amazonica*, Ecuador 4790
- new species, morphology, *Palacorthiza*, new subgenus, *Cnemidorthiza* 1656
- new species, morphology, *Pamphilius lanatus* 8829
- new species, morphology, *Parabeta areolata*, *Parabeta callosa*, *Parabeta dubitata*, *Parabeta stylifera*, *Parabeta tapirae*, Brazil 8840
- new species, morphology, *Paradamoetes changuinola*, Panama 7149
- new species, morphology, *Paradrina susciajana*, Yugoslavia 4893
- new species, morphology, *Paragus asconensis*, *Paragus antioinetae*, France, Corsica, Sardinia 8793
- new species, morphology, *Paralimosina anaptera*, *Paralimosina franzi*, *Paralimosina gomerenis*, *Paralimosina piliferomorpha*, Canary Is. 7969
- new species, morphology, *Parapanteliella eugenia*, USSR, Ukraine 7218
- new species, morphology, parasites, *Protomyobia indianensis*, hosts, *Sorex longirostris*, USA, Indiana 1591
- new species, morphology, *Paraxillidius*, Brazil 6373
- new species, morphology, *Parandjapyx zanzoudakii*, Crete 8782
- new species, morphology, *Parancella tijuanae*, Brazil, Rio de Janeiro 8779
- new species, morphology, *Parvidens andae*, Namibia 4843
- new species, morphology, *Peoria padrella*, North America 7230
- new species, morphology, *Pephyena longirynchus*, *Pephyena microlevis* 4857
- new species, morphology, *Perisoma bavariae*, Germany, Fed. Rep., Bavaria, Murnauer Moos 4730
- new species, morphology, *Perissopalla calculata*, *Perissopalla rationalis*, *Perissopalla pogoi*, Venezuela 4764
- new species, morphology, *Perithemis rubita*, Ecuador 6451
- new species, morphology, *Phaonia asierans*, USSR, Siberia 6393
- new species, morphology, *Pherbellia*, North America 5571
- new species, morphology, *Phonogaster longigeniculata*, China, People's Rep. 4904
- new species, morphology, *Phora speighti*, Ireland 6391
- new species, morphology, *Phuracidae*, Brazil 3971
- new species, morphology, *Phyllobaenus atriplex* 6360
- new species, morphology, *Phyllocoptes*, India 3964
- new species, morphology, *Picicola striata*, Brazil 4859
- new species, morphology, *Pipunculius lichtwardii*, Czechoslovakia 2418
- new species, morphology, *Plagiognathus ribesi*, introduced species, Canada, British Columbia 4007
- new species, morphology, *Platycarus oligolacis*, *Platycarus dontocornus* 8719
- new species, morphology, *Platycyrtus hemiruber*, Panama, Porto Bello 4848
- new species, morphology, *Plecoptera*, Australia 4907
- new species, morphology, *Plinthus pawlowski*, Turkey, Tates Mts. 19
- new species, morphology, *Ploccypallus angusticeps*, *Hectopysylla gracilis*, Argentina 7241
- new species, morphology, *Plouscampe bonadonai pavani*, Switzerland, Valais 4822
- new species, morphology, *Polana portochuela*, *Polana inania*, *Polana pravada*, *Polana tubifera*, *Polana tubera*, *Polana orcula*, Bolivia 8809
- new species, morphology, *Polana portochuela*, *Polana inania*, *Polana pravada*, *Polana tubifera*, *Polana tubera*, *Polana orcula*, Bolivia 5585
- new species, morphology, *Polynema eme* 7987
- new species, morphology, *Polyzonium valerii*, *Polyzonium cyathiferum*, USSR, Siberia 6463
- new species, morphology, *Priochirus lankus*, *Thoracochirus decanus*, *Pacderus*

Subject Index

Taxonomy. (continued)

- beaucheti*, *Paderus loebli*, *Paderus murrari*, India, Sri Lanka 4809.
new species, morphology, *Prionus arsanus*, *Prionus linsleyi* 7957.
new species, morphology, *Prodacnusa flavifacies*, Zambia 7237.
Prodiamesa levidavovae, USSR, Teyptse L. 6389.
new species, morphology, *Proklesia daria*, *Proklesia carolea*, USA 8813.
new species, morphology, *Prosmium laurii*, Morocco 3993.
new species, morphology, *Protostolus martineze*, Venezuela 6368.
new species, morphology, *Protosialis*, South America, Amazon R. Basin 7235.
new species, morphology, *Protomassaliae*, India, Kashmir 1641.
new species, morphology, *Putruza*, USA, Alaska 4062.
new species, morphology, *Pseudochortius quercetorum*, USA, Florida 1618.
new species, morphology, *Pseudocryptus clavatus*, USSR, Russia, Sakhalin I. 6439.
new species, morphology, *Pseudoanthidium micronites*, *Pachyanthidium semiluteum*,
Anthidium flavorum,
Anthidium tergomanorum, Africa 5596.
new species, morphology, *Pseudoclon atoki*, Philippines 7191
new species, morphology, *Pseudodontonyx novissimus*, *Pseudodontonyxerus*
karakalensis 8818.
new species, morphology, *Pseudobolbus tibialis*, Costa Rica 7943
new species, morphology, *Pseudomyoma punctipennis*, *Thecophora ruficornis*,
Argentina 6392.
new species, morphology, *Pseudonympha camdeboo*, South Africa 8837.
new species, morphology, *Pseudoprotopier* 7946.
new species, morphology, *Pterostichogaster disparipungus*, parasites, hosts,
Heteronyx desmetianus 1590.
new species, morphology, *Pseudoscaphrus*, Kenya 4768.
new species, morphology, *Pseudosyrphus kempfi*, India 7158.
new species, morphology, *Pseudotrypoxenus*, Strangalia, Central America 6385.
new species, morphology, *Pteromalidae*, Asia 35.
new species, morphology, *Ptilidius*, Denmark 4783.
new species, morphology, *Ptycha nadleri*, Israel 8841.
new species, morphology, *Ptycha verna*, Asia, Himalayas 8814.
new species, morphology, *Ptycha verna*, Asia, Himalayas No. 4016.
new species, morphology, *Rachana circumdata*, *Rachana circumdata panayensis*.
Deudorix hypargyria philippini, Philippines 4891.
new species, morphology, *Rediviva*, Costa Rica 7943.
new species, morphology, *Rhamphus*, France 8757.
new species, morphology, *Rhopalosiphoninus chreitis*, India 7198.
new species, morphology, *Rhyacophila*, USA, California, Placer Co. 6461.
new species, morphology, *Rhyacophytodeps*, India 7134.
new species, morphology, *Ricinoides megasthenis*, Ivory Coast 7156.
new species, morphology, *Ruminia*, *Cleridia*, *Aphalara migrimaculosa*, *Padylla*
montanica, USSR, Transcaucasia 6423.
new species, morphology, *Sandersulus panamensis*, Panama 6421.
new species, morphology, *Sasaccus inca*, parasites, *Lestoris inca*, Peru 1587.
new species, morphology, *Sasaccus ghyophilacea*, Brazil 8736.
new species, morphology, *Satchellia vallanti*, Italy, Bormida R. 3192.
new species, morphology, *Scaphophis affluvis*, *Chlorotettix canolatus*, *Ikona*
murrayae, Costa Rica 7981.
new species, morphology, *Scatope globulicava*, Europe, Alps 6409.
new species, morphology, *Scheogastonia nipa*, Papua New Guinea 4763.
new species, morphology, *Scirpophaga kumalai*, *Scirpophaga nepalensis*, Nepal 7221.
new species, morphology, *Scrobipalpa sundat*, Iraq 6444.
new species, morphology, *Scrotophaga brachylepis*, Costa Rica 6352.
new species, morphology, *Setodes dixiensis*, *Setodes areolaris*, USA, Southeast
5612.
new species, morphology, *Sigara papuensis*, Papua New Guinea 4748.
new species, morphology, *Sinentomon chin*, Korea 6459
new species, morphology, *Siphonurus demaryi*, Canada, Nova Scotia 1632.
new species, morphology, *Siphonurus minnoi*, *Siphonuloecia cestum*, North America
4840.
new species, morphology, *Siphona ingense*, *Siphona messilli*, *Siphona variata*,
Siphona martini, Denmark, Sweden 7180.
new species, morphology, *Smnnthus carolinensis*, USA, South Carolina 1617
new species, morphology, *Smnnthus incognitus*, USA, Florida 4821.
new species, morphology, *Solenostylus*, Canada 7186.
32 new species, morphology, South America, Central America, Guyana 7205.
8 new species, morphology, *Sperchon*, USSR 7131
new species, morphology, *Sphaerichthonius*, Ameriooppa, Multioppa, Oppa.
Tecteraemus, Tabiti, Fiji, Philippines 7139
new species, morphology, *Sphaogaster paransai*, *Sphaogaster suturalis*, Brazil 6381
new species, morphology, *Stenalia*, China, *Mordellistena deserticola* 6375.
new species, morphology, *Stenopogon*, Micrometa, India 7179
new species, morphology, *Stenus osbedali*, USSR, Kazakhstan, Hungary 7952
new species, morphology, *Stenomostoma uferki*, Spain 7931
new species, morphology, *Stictella furchildi*, *Stictella gyllspili*, *Stictella*
villagasi 8827
new species, morphology, *Suricatuco fenneus*, Egypt 6448.
new species, morphology, *Symmetrischema kendallorum*, USA, Texas 7992.
new species, morphology, *Syndactea ekolsola* 5570.
new species, morphology, *Styropsus*, Asia 8786
new species, morphology, *Tabanidae*, China, People's Rep. 814
new species, morphology, *Tachinus*, China, People's Rep. 7173
new species, morphology, *Tachinus*, China, People's Rep. 7186.
new species, morphology, *Tenopteroryx nelsoni*, USA, Virginia 4906
new species, morphology, *Tanaccia corytus viasayana*, Philippines 4890
new species, morphology, *Tarsonemidae*, USSR, Crimea 6342.
new species, morphology, *Tarsonemus*, USSR 6347
Tauritermes vitulus, Brazil 8835
new species, morphology, *Tenebrionidae*, Japan 7186
new species, morphology, *Tenebrio*, Japan, Sado I. 7143
new species, morphology, *Tegopolys kaliyani*, *Tetra lanneensis*, India 7137
new species, morphology, *Telenomus punicigaster*, *Telenomus homoterpes*, *Ascoleus*
turkarkandas, Turkey 7988
new species, morphology, *Terulia toldi*, Panama, *Terulia triangularis*, Nicaragua
7145
new species, morphology, *Tetrastichus cecidoborus*, USA, California 7963
new species, morphology, *Therdion antoni*, Czechoslovakia 8737
new species, morphology, *Thermonecus sibylei*, *Thermonecus zimmermani* 7953
new species, morphology, *Tingis otomana* 8804
new species, morphology, *Vitya lamottei*, Brazil, Bahia 4769
new species, morphology, *Tortya boguella*, Costa Rica, Cocos I. 4488
new species, morphology, *Toxocarpus*, 2.
new species, morphology, *Trachymyrmex kempi*, Paraguay, Chaco Basin 5595
new species, morphology, *Tramea rustica*, *Tramea minuta*, Venezuela 8000.
new species, morphology, *Trimessus inexpectans*, *Trimessus beaumonti*, Turkey.

Taxonomy, (continued)

- new species, morphology. *Trepobates carri*. *Trepobates pothemi* 5578.
 new species, morphology. *Trichaphanopus raffaldianus*, France 8746.
 new species, morphology. *Trichastura*, Ecuador 5611.
 new species, morphology. *Trichura venerea* 4040.
 new species, morphology. *Trichogramma mali* landense, USA, Maryland 5600.
 new species, morphology. *Trichogramma schuberti*. *Trichogramma rhenana*, France, Alsace 4876.
 new species, morphology. *Trichonyssodrys cinctus*. *Trichonyssodrys melasmus*.
 Brazil 4778.
 new species, morphology. *Trichoptera*, Eurasia 4067.
 new species, morphology. *Trumena intermedia*, Italy 3997.
 new species, morphology. *Trochiloschemma michailovi* 7947.
 6 new species, morphology. *Trombiculidae*, Papua New Guinea 6339.
 new species, morphology. *Trombigasta novabritannia*, Papua New Guinea, New Britain 4762.
 new species, morphology. *Tychobothynus strunati*, USA, Tennessee, Warren Co. 4815.
 new species, morphology. *Tylana nigromaculata*, *Tylana rodriguezi*, Mascarenes 4866.
 new species, morphology. *Typhedanus eliasi*. *Typhedanus cursioi*, Brazil 8838.
 new species, morphology. *Typhlocyba newara*, Baroda, India 34.
 new species, morphology. USA, Louisiana, Abgrallaspis liroiodendri 1637.
 new species, morphology. *Vandea dudleyi*, Malawi 5564.
 new species, morphology. *Ventidius subnive*, India, West Bengal 7195.
 new species, morphology. *Vandesia polyseta* 6345.
 new species, morphology. *Xenelmis leechi*, *Xenelmis marcapata*, Peru 4782.
 new species, morphology. *Xestocephalus*, South America 5588.
 11 new species, morphology. *Xestocephalus*, Panama 7201.
 new species, morphology. *Zale chisticus* 5603.
 new species, morphology. *Zelotocoris vicosinus*, Brazil, Vicosa 4850.
 new species, morphology. *Zepedatus watanabei*, *Heteropogonalia biserialis*, Thailand 5550.
 new species, morphology. 11 species, *Scydmaenidae*, Ecuador, Guatemala 7936.
 new species, morphology. 13 species. *Hyphidura* 4816.
 new species, morphology. 13 species. *Laminiae*, Africa 7938.
 new species, morphology. 13 species. USA, Mexico 6426.
 new species, morphology. 14 species. *Aphanius*, North America 6435.
 new species, morphology. 15 species. *Lutrognus*, North America 6379.
 new species, morphology. 16 species. *Lordithon*, North, America, Central America 6380.
 new species, morphology. 2 species. *Pogonomyrmex*, USA, Texas 6432.
 new species, morphology. 28 species. *Sarcobacinae*, Panama 6376.
 new species, morphology. 3 species. *Ambrysus*, Mexico 6416.
 new species, morphology. 3 species. *Calamyrus*, Africa 4766.
 new species, morphology. 3 species. *Neocolla*, Mexico, Colombia 4702.
 new species, morphology. 2 species. *Trochilogramma*, USA, Hawaii 4021.
 new species, morphology. 5 species. *Diastylus*, South America 7970.
 new species, morphology. 5 species. *Eothelana*, Philippines, Papua New Guinea 3989.
 new species, morphology. 5 species. *Systroplus*, China, People's Rep., Taiwan 3991.
 new species, morphology. 5 species. *Tarsomus*, Eburya 7932.
 new species, morphology. 6 species. *Phalantus*, India, Sri Lanka 4808.
 new species, morphology. 66 species. *Laminiae*, Africa 7939.
 new species, morphology. 67 species. *Austrohartigia* 4842.
 new species, morphology. 7 species. *Mytilaena*, Nearctic Region 4742.
 new species, morphology. 8 species. *Cervionidae*, Mascarenes 4813.
 new species, morphology. 8 species. *Hyphantus* 6361.
 new species, morphology. 8 species. *Palaeorhiza*, Papua New Guinea, Solomon Is. 4885.
 new species, morphology. 8 species. *Pseudostegana*, Papua New Guinea, Philippines, Sabah 3990.
 new species, morphology. 9 species. *Cyrtusa*, India 4810.
 new species. *Neorhynchodes*, Antarctica, Victoria Land 8722.
 new species. *Neobussum apunicum*, Italy 1594.
 new species. *Neolindus*, Peru, Bolivia 1616.
 new species. *Neomacholus sparsus*, USA, Florida 2464.
 new species. *Neotyphlus silfbergii*, *Corimela bispadalenis*, *Apion tomiense*, USSR 5557.
 new species, new combinations, morphology. *Podagrionina* 1884.
 new species, new genera. *Anneckcoris brunneus*. South Africa 6501.
 new species, new genera. *Callimetopides albomaculatus*, *Sybra mazzoni*, Sri Lanka, New Guinea 1183.
 new species, new genera. *Calyptra*, China, People's Rep. 3197.
 new species, new genera. *Crypharhina pseudobifida* 41.
 new species, new genera. *Donicotopus beandanus*, Canada, Northwest Territories 4826.
 new species, new genera. *Dyniscidae*, Brazil 809.
 new species, new genera. *Epicrines aztecus*, Mexico 8743.
 new species, new genera. *Eumidea pallidula*, *Eumidea tundraus*, USSR, Magadan Region 6340.
 new species, new genera. *Ghiliarella*, *Buninotus*, Panama 1634.
 new species, new genera. *Hughlechia giuliani*, Australia 4779.
 new species, new genera. *Leptopirina papillata* 1598.
 new species, new genera. *Maniapterys carancabua*, USA, Texas 5604.
 new species, new genera. *maniptheris*, *Annapheres himoteocostae*, Brazil 8741.
 new species, new genera, morphology. *Atlantermes guarinum*, *Atlantermes ibitingaru*, Brazil 8836.
 new species, new genera, morphology. *Ceratolepis proboscis*, Brazil 8739.
 new species, new genera, morphology. *Chaetorechiana procerus*, Japan, Shikoku I. 4818.
 new species, new genera, morphology. *Drosophilidae*, Australia 8705.
 new species, new genera, morphology. *Guatubesia clare*, Brazil, Sao Paulo 6353.
 new species, new genera, morphology. *Oncosomochus besucheti*, *Emmelotibia besucheti*, Lebanon 7164.
 new species, new genera. *Nasalalgies borneensis* 11.
 new species, new genera. *Omicritus* 4786.
 new species, new genera. *Sarcophagidae*, China, People's Rep. 24.
 new species, new genera. *Tepidussus mureli*, *Tropisternus jolyi*, Venezuela 3184.
 new species, new genera. *Tonoirella brebionis*, *Caenobrunetia chinoflagellata*, Brazil 1630.
 new species, new genera. *Umbiota antennata*, *Peritropella malgache*, New Guinea, Umboni, Madagascar 4852.
 new species, new genus, morphology. *Cervicoris brevisirostris*, Nepal 7979.
 new species, new records, *Sciandae*, USSR 6396.

Taxonomy, (continued)

- new species, new subspecies, *Geotrupes martensi*, *Geotrupes stellosum*, *Geotrupes stellosum annapurnicus*, Nepal 807
- new species, *Niota afghanica*, *Anisochrysa nuristan*, *Brissocochrysa naumanni*, Afghanistan 4060
- new species, *Nupedia picturata*, China, People's Rep. 813
- new species, *Nymphes*, *Myodactylus*, Australia 3227
- new species, *Oniomysia puerarivora*, *Amauromyza belandandae*, *Phytomyza hasegawai*, Japan 2419
- new species, *Oreothalia spintarsis*, *Oreothalia sierrensis*, *Oreothalia chilicola*, Nearctic Region 2426
- new species, *Orobolobus tanshanicus*, USSR 16
- new species, *Paraleucopis mexicana*, Mexico, California Gulf 2425
- new species, *Paraschoenastia magnatula*, Venezuela 8727
- new species, *Parasites*, *Aphelinus prociphili*, *Prociphilus fraxinifoli*, USA, Iowa 39
- new species, *Parasites*, *Cephaeta hayati*, India 4872
- new species, *Parasites*, *Eadia neurotrichus*, *Neurotrichus gibbsii* 796
- new species, *Parasites*, *Eurytoma* 4878
- new species, *Parasites*, *Hosts*, *Tortricobaculula kiriboccephalus*, *Pitohui kiriboccephalus*, New Guinea 3968
- new species, *Parasites*, *Promucheya lukoschii*, *Mammalia* 92
- new species, *Parasites*, *Saunderssonia bakeri*, *Quadriceps adustus*, *Haematopodidae* 516
- new species, *Parasites*, *Tegolophus spindialis*, *Tegolophus vitexis*, India, West Bengal 669
- new species, *Parasites*, *Trombiculidae*, *Rousettus amplexicaudatus*, *Rallus torquatus*, Philippines 794
- new species, *Parasites*, *Tropitaelaps koenigueri*, *Apis dorsata*, Sri Lanka 3973
- new species, *Parasites*, *Tyrodectus*, Australia 1589
- new species, *Parasitoids*, *Aphididae*, India 7213
- new species, *Parasitoids*, *kumungensis*, China, People's Rep. 2436
- new species, *Phenacoccus hirsutus*, 1194
- new species, *Pherbellia hackmani*, *Pherbellia stylifera*, *Pherbellia lutheri* 5572
- new species, *Phylotrypa josephi*, *Syocscapter hirticola*, India 8830
- new species, *Philebotomus rousetti*, South Africa 1627
- new species, *Pison areniferum*, *Pison ciliatum*, *Pison barbatum*, Australia 2448
- new species, *Polycentropus piristinus*, Italy 3234
- new species, *Psallus phycocrypti*, USA, New York 2435
- new species, *Psychodidae*, USSR, Azerbaijan, Iran 3199
- new species, *Rhorus bartelti*, *Rhorus gaspasiensis*, *Hyperbatus marmoratus* 1650
- new species, *Sasatrombicula umboensis*, Papua New Guinea 8728
- new species, *Scopaeus fageli*, *Scopaeus girardi*, Ivory coast 1603
- new species, *Sergentomyia turfanensis*, China, People's Rep. - Szechuan Province 2422
- new species, *Serromyia beveli*, *Serromyia maculipennis*, *Serromyia punctata*, Sri Lanka 7964
- new species, *Seten*, *Formosa* 1610
- new species, *Spermophagus caricus*, Turkey 8777
- new species, *Spinturnix tibetensis*, China, People's Rep. 2386
- new species, *Stenonema bednariki*, USA, Kentucky 2432
- new species, *Stethorus koreanus*, *Seymouria dougall*, Korea 785
- new species, *Strongylophthalmyia stackelbergi*, USSR 27
- new species, *Stylopauropus usbekistanicus*, *Stylopauropus golovatchi*, *Eurypauropus tetrastichus*, USSR 4070
- new species, *Symbionts*, *morphology*, *Cosmetoelaphus* 800
- new species, *Tamborina communi*, Australia 2412
- new species, *Teinocoptes pahangensis*, *Teinocoptes conycteris*, *Teinocoptes brevis*, Malaysia, India 8726
- new species, *Tenualpalpus cupressoides*, *Tenualpalpus paroxyphoides*, *Aegypthia eremia*, Israel 8724
- 5 new species, *Tenualpalpus*, India 8715
- new species, *Tetragathia boninensis*, Japan, Bonin Islands 1593
- new species, *Thaumalea alpina*, *Thaumalea toscana*, Europe 2428
- new species, *Thriphragus verniculus*, British Isles, Sicily Is. 8729
- new species, *Timberlaxia signata*, *Timberlaxia gilva*, South Africa, Transvaal 8822
- new species, *Tipula submontium*, Iberia peninsula 9469
- new species, *Toxorhynchites changbaensis*, China, People's Rep. 25
- new species, *Trichogramma*, Hawaii 8820
- new species, *Tricorynus dudleyae*, *Tricorynus fuliginea*, *Byrrhodes ovatus*, USA 2400
- new species, *Trypanophellus necopinus*, Cuba 7167
- new species, *Urosigalphus yucatanensis*, *Urosigalphus meridianus*, Mexico 5599
- new species, *Vargatula pacifica*, Solomon Is., Nissan I. 8730
- new species, *Walchia tianguangshanensis*, China, People's Rep. 7
- new species, *Xestia*, North America 40
- new species, 16 species, *Cleradidi*, Australia 3210
- new species, 30 species, new subspecies, 6 subspecies, *Trypangulum*, Society Is 831
- new species, 5 species, *Cemus*, China, People's Rep. 2443
- new subspecies, *Carabus rutilans jannei* 8771
- new subspecies, *morphology*, *Agrias anyori*, Costa Rica 7233
- new subspecies, *morphology*, *Apis mellifera*, India 4045
- new subspecies, *morphology*, *Carcinomyia lichenigera nuytanae*, India 4045
- new subspecies, *morphology*, *Conocephalus dorsalis beybenkoi*, USSR, Russia, Khabarovsk Region 7239
- new subspecies, *morphology*, *Dimorphopterus cornutus*, Papua New Guinea 3211
- new subspecies, *morphology*, *food plants*, *Glovia medusa editha*, USA, California 7226
- new subspecies, *morphology*, *Lepidochrysops jamei clauseni*, South Africa 5602
- new subspecies, *morphology*, *Libellodes longicornis verontensis*, Europe, Alps 4058
- new subspecies, *morphology*, *Lutzomyia olmeca novia*, Brazil, Manaus 4839
- new subspecies, *morphology*, *Notodontidae*, USSR, Caucasus 4043
- new subspecies, *morphology*, *Onthophagus ruficapillus gulanensis*, Iran 7171
- new subspecies, *morphology*, *Tabanus canipalpis tertiaria*, USSR 6390
- new subspecies, *morphology*, *Trichium verne witti*, Bulgaria 4046
- new subspecies, *morphology*, *Zygaena araxis kurti*, Turkey 4051
- new subspecies, *morphology*, *Zygaena ephialtes smolkana*, Greece 4732
- new subspecies, *morphology*, *Zygonotus torrida insulana*, Mauritius 7906
- new subspecies, *morphology*, *Papilio indra phyllisae*, *Papilio indra panamintensis*, USA, California 7223
- new taxa, *Anthrribidae*, Japan 1608
- new taxa, *morphology*, *Batrachomorphus*, Africa 4865
- new taxa, *morphology*, *Cicindelidae*, Australia 4804

Taxonomy, (continued)

- new taxa, *morphology*, *Corytophrichini* 22
- nomenclature, *Dicerus* 3985
- nomenclature, *Ecdyonurus lateralis*, *Ecdyonurus grandiae*, *Ecdyonurus gridellii*, Italy 3145
- nomenclature, *Eumesosoma* 2391
- nomenclature, families, *Ephemeroptera* 4847
- nomenclature, *Laccobius cartillialis*, *Laccobius arenarius*, *Laccobius spangleri* 4775
- nomenclature, *Nessaea* 839
- nomenclature, species, *Lycanidae* 2463
- nomenclature, synonymy, *Heteropsini*, *Purpuriceni* 4807
- nomenclature, synonymy, *Neosasia* 4004
- nomenclature, type specimens, *Gerridae*, India 7192
- occurrence, *Stenomera mexicana*, Panama 3166
- Olpium minutum* 5553
- origin, geographical distribution, *Chrysidoidea*, Neotropical Region 2374
- parasites, geographical distribution, *Amphipsylla quadratidigitata*, host preferences 783
- parasites, *Heterodon*, Australia 2921
- parasites, *Insecta* hosts, biological control, *Nematoda* 3614
- parasites, *Mitonyssus*, *Chiroptera*, South America 10
- parasites, new species, *Whartonia kulamadousensis*, *Dobsonia pannietensis*, *Dobsonia mullucensis*, Papua New Guinea, Iran Java 797
- parasites, synonymy, *Brachynotocoris puncticornis*, *Brachynotocoris heidemanni* 32
- Parachates pseudonotus* 6079
- pathogens, fungi, *Entomophthora* taxonomic revision effects on 830
- phylogeny, *Ambostrinae*, Australia 8819
- phylogeny, biogeography, *Clamidae*, North America 1576
- phylogeny, biogeography, *Philotaridae* 4909
- phylogeny, classification systems, evolution, *Psocoda* 8669
- phylogeny, classification systems, *Vespoidea* 4873
- phylogeny, eggs morphology, *Pteronarychia* 8036
- phylogeny, evolution, *Colymbetes* 5504
- phylogeny, food plants, *Rhopalidae* 8671
- phylogeny, genera characteristics, *Araea* 776
- phylogeny, genetics, *Elaphrus americanus* 3189
- phylogeny, homoplasy, *Insecta* 5505
- phylogeny, karyotypes, *Orthocladinae* 2408
- phylogeny, morphology, *Chrysomelinae*, British Isles 5636
- phylogeny, *Pteridae*, Europe 5506
- phylogeny, *Sophodirps* 5610
- phylogeny, systematics, *Trachypachidae*, *Hydradephaga* 4785
- population genetics, chromosomes, *Lygaeus kalmii* 6282
- population genetics, genetic variance, host plants, *Peridiplophora*, *Eucalyptus marginata*, *Eucalyptus nidi* 7875
- reclassification, *Trichoprosopon* 6400
- records, morphology, *Lepidoptera*, Spain, Guadalajara 7080
- reviews, *Chrysidae*, North America 7112
- reviews, classification, *Coniopteryx* 4902
- reviews, *Gyponinae*, Nearctic Region 8812
- reviews, *Isoptera*, India 5427
- reviews, keys, *Geomydoidea californicus* 85
- reviews, morphology, *Nemopteridae*, Turkey 4727
- reviews, *Nyctophysis* 6382
- revision, *Aleuropteryx*, *Coniopterygidae* 1664
- revision, biotyping, *Polypedium* 3198
- revision, identification keys, *Archipocus ghesquieri*, Africa 848
- revision, *Meranopus*, *Dicroaspis*, *Calyptomyrmex*, Ethiopian Region 1652
- revision, *Myrmicinae*, Ethiopian Region 1651
- revision, new families, *Cicadellidae*, Africa 828
- revision, new families, 78 new taxa, *Cicadellidae*, Africa 829
- revision, new subspecies, *Janomima damfelfi*, Africa 840
- revision, nomenclature, *Pompilus* 834
- revision, *Phycodes* 1661
- revision, *Rhopalosomatidae* 832
- revision, synonymy, *Archisolv*, *Saldua* 1621
- revision, synonymy, *Oedalea* 1670
- revision, synonymy, *Paraboloponinae* 1640
- revision, synonymy, *Scirpophaga* 1662
- revision, *Usambilla* 1669
- speciation, *Spinodossites* 1563
- species composition, check lists, *Cicindelidae*, *Carabidae*, Europe 9463
- species composition, geographical distribution, surveys, *Rhyacophila*, Hungary 3940
- species composition, *Lepidoptera*, Kenya 7907
- species lists, *Nemopteridae*, Turkey 4738
- status, coloration, *Catocala* 7227
- status, identification, *Insecta*, Africa 3178
- status, keys, *Trioza* 2438
- status, larvae morphology, *Catocala pretiosa* 7231
- status, morphology, *Papilio machaontrajensi* 7229
- status, *Nomia foxii* 5601
- subfamilies, *Anagolidae* 3967
- surveys, India 784
- sympatric populations, phenotypes, *Apodemus mormo*, USA, Arizona, Santa Cruz Co. 6878
- synonymy, *Agyrtus nobeli*, *Agyrtus bicolor* 6359
- synonymy, *Allocaopia zekia*, *Allocaopia wrayi* 6457
- synonymy, *Blaps lethifera*, *Blaps abditi* 8770
- synonymy, breeding, *Dendrococcus aphidum*, *Dendrococcus breadalbensis* 4019
- synonymy, *Bruchidae*, Nearctic Region 3162
- synonymy, *Buprestidae* 6378
- synonymy, *Chironomus paulfreemanni*, *Chironomus brunneus* 3999
- synonymy, *Chironomus australis*, *Chironomus xanthopus* 1648
- synonymy, *Coccinellidae*, Neotropical Region 7956
- synonymy, *Coccus celticus*, *Coccus consimilis*, Papua New Guinea 3215
- synonymy, *Conostigmus cylindricus*, *Conostigmus melanoccephalus* 8833
- synonymy, *Coria* 1635
- synonymy, *Curculioninae*, Japan 1599
- synonymy, *Estenothrips*, *Vianodes* 8774
- synonymy, *Formica galliarum*, *Formicaphagus rhamphasti* 3225
- synonymy, genera, *Guignotus*, *Hydrolyphus* 2396
- synonymy, *Geostiba carli*, *Sipalia lindrothi* 4787
- synonymy, *Hydrolyphus*, *Guignotus* 4796
- synonymy, *Hylastes rufipes*, *Hylastes salebrosus*, *Hylastes opaculus*, *Hylurgus*

Taxonomy, (continued)

- scabripennis 1596
 synonymy, keys, Prokelisia, USA 8813.
 synonymy, Lepthyphantes, Europe, Alps 7899
 synonymy, Manestra passa, Grapphania mutans 3224
 synonymy, Mesembrynus, Hesychia 4050.
 synonymy, Miridae 5581
 synonymy, morphology, Caloptilia tetratypa, Caloptilia octopunctata 7219
 synonymy, morphology, Diplolepis rosae 1645
 synonymy, Morrisonia peracuta, Persectania aversa 3224
 synonymy, nomenclature, Brueelia superciliosa, Alcedoffula alcedinis 5607
 synonymy, nomenclature, Erythemis, Lepthemis, Mesothemis 846
 synonymy, nomenclature, Uloniia, Clogmia 7960
 synonymy, Ophiogomphus incurvatus, Ophiogomphus carolinus 8001
 synonymy, Opinae, Microgasterinae, Hungary 8687
 synonymy, Pachymerisus albus, Pachymerisus angustatus 4034
 synonymy, parasites, Trichomalus 5592
 synonymy, Proctochrysonia howardae, Cochliomyia macellana 7183
 synonymy, Psalidoremus 8775
 synonymy, Pseudoscorpions 5552.
 synonymy, Psychodidae 5568
 synonymy, Radfordiella, Schoengastia, Papua New Guinea 4763.
 synonymy, Sarcophaga formosana, Sarcophaga longicornis 4835.
 synonymy, Sphecidae, Palaearctic Region 8828.
 synonymy, Sphinx purpuralis, Zygaena purpuralis 4044
 synonymy, Strigiphilus lophostrius, Strigiphilus transversifrons 3225
 synonymy, Sturmodius incompus, Sturmodius caliginos 3225
 synonymy, Symblites gibberosus, Symblites durii, Symblites montanus 4805
 synonymy, Tanytarsus bernhardi, Tanytarsus longistans 4829.
 synonymy, Tinea 5511.
 synonymy, Tylotropidius royi, Tylotropidius gracilipes 780.
 systematics, classification, Insecta 3169.
 systematics, Eucyrtidae 4025.
 systematics, identification, enzymes, Aphis fabae 7206.
 systematics, new species, Cricotopus zavreli 2424.
 systematics, Nomadinae 4030
 systematics, nomenclature, Spilostethus pandurus 7196.
 systematics, Tineidae, Symmocyidae, Pterophoridae, Spain, Portugal 2466
 types, museum collections, Bombyliidae 8783
 ultrastructure, trifoliate organ, Atherigona 4105.
 wings, morphology 1.
- Taxonomy,**
 morphology, Sphinx minos 4047.
Taygete parvella,
 synonymy, Epithectis xylochroa 4052.
Tayloriomyia iota,
 morphology, immature stages, Australia 2504.
Tectermarus,
 new species, taxonomy, morphology, Tahiti, Fiji, Philippines 7139
Tectocephus,
 new species, taxonomy, morphology, Japan 2.
Tectocephus titianus,
 new species, taxonomy, morphology, Japan, Sado I. 7143.
Tegicula maculata,
 pollinators, population dynamics, flowering phenology, Yucca whipplei 8347.
Tegolophus kalyani,
 new species, taxonomy, morphology, India 7137.
Tegolophus spondilialis,
 new species, parasites, Spondias mangifera, India, West Bengal 3969.
Tegolophus vitzia,
 new species, parasites, Vitez negundo, India, West Bengal 3969
Tehama bonifatella,
 pheromone traps, attractants, electroantennograms 5701.
Telocoptes brevior,
 new species, taxonomy, morphology, India 8726
Telocoptes conycticus,
 new species, taxonomy, morphology, Malaysia 8726
Telocoptes pahangensis,
 new species, taxonomy, morphology, Malaysia 8726.
Telausona monticola,
 bionomics, life cycle, phenology, USA, Delaware 9112.
Telaus,
 taxonomic revision, morphology 2461.
Telaus crassifemur,
 new species, morphology, taxonomy 2461
Telaus neptuni,
 new species, morphology, taxonomy 2461
Telaus niger,
 new species, morphology, taxonomy 2461
Telaus punctiformis,
 new species, morphology, taxonomy 2461.
Telaus tericola,
 new species, morphology, taxonomy 2461
Telaus villus,
 new species, morphology, taxonomy 2461
Telenomus aradi,
 new records, geographical distribution, Hungary 8685
 parasitism, eggs, Aradus cinnamomeus, Finland 5934
Telenomus californicus,
 mating, reproduction, oviposition, parasites, hosts, Orgyia pseudotsugata 2015
 overwintering, oviposition, biology, parasites, eggs, Orgyia pseudotsugata 2014
Telenomus clisocampeae,
 parasitoids, infestation, eggs mortality, Malacosoma americanum 8314
Telenomus euproctides,
 life cycle, life span, temperature effects, China, People's Rep., Hunan Province 2792
Telenomus hakonenella,
 morphology, taxonomy 4020
Telenomus heliothidis,
 parasitoids, host selection, eggs, Heliothis virescens 2815
 parasitoids, host selection, kaurenomones, eggs, heliothis virescens 5186
Telenomus homopterae,
 parasitoids, new species, taxonomy, morphology, Turkey 7988
Telenomus nawal,
 morphology, taxonomy 4020
Telenomus nephalae,
 parasites, suitability tests, Chilo auriculus 1217
Telenomus podisi,
 parasitoids, reproduction, fecundity, longevity 8322
Telenomus poeta,
 morphology, taxonomy 4020
Telenomus punctigaster,
 parasitoids, new species, taxonomy, morphology, Turkey 7988
Telenomus remsi,
 parasitism, Azadirachta indica, effects on: Spodoptera litura 6214.
Telenomus turcius,
 parasitoids, new species, taxonomy, morphology, Turkey 7989
Telegryllus commodus,
 damage, pasture, weeds loss, feeding 9303
 effects on host plants, damage, Trifolium repens, Lolium perenne 2254
 hemolymph, hemagglutination activity, purification, physicochemical properties 157.
 mating effects on females locomotion, sexual behavior 4284
 pathogens, surveys biological control, Australia, Victoria 1003
 population density, developmental stages, crops damage 3827
Telegryllus mitratus,
 pest outbreaks, India, Meghalaya 7694
Telegryllus oceanicus,
 aggressive behavior, social hierarchy, dominance 4652
 flight muscle development 6521.
 neurons, axons, regeneration, muscles 2530
 social behavior, aggregation, phonotaxis, song 7499
Telmatoctopus carolinianus,
 geographical distribution, Germany, Fed. Rep., Bavaria, Murnauer Moos 4730
Telostegus microcinerascens,
 prey 2146.
Telphusa pistaciae,
 life history, pests, crop fields damage, Pistacia vera, Iran 5296.
Temelucha minuta,
 parasites, incidence, Phthorimaea operculella, Australia, Queensland 2828
Temephora,
 chemical control effects on disease transmission, Anopheles stephensi 663
 insecticides, pest control Simulium ornatum France, Neune R Valley 4546.
 insecticides, toxic to larvae Simulium ornatum Simulium equinum 5053
 pollution effects streams, community composition, Insecta 7021.
 pollution effects, streams, Insecta 5437.
Temaspidiotus destructor,
 biological control, predators, Coccinellidae, New Hebrides 4576
Temnochila chlorodia,
 toxicity, insecticides, lindane, carbaryl, chlorpyrifos 4228.
Temnochila coerulea,
 new records, geographical distribution, Sweden, Gotska Sandöen I. 4704
Temperate environment,
 population genetics, reproductive strategy, divergence, tropical environment, Drosophila melanogaster 7057
Temperature,
 acclimation, environmental effects, feeding, Cryptotermes 5128.
 activity patterns, diurnal variations, allopatric populations, Glossina pallidipes, Kenya 7525.
 carbonyl, ester hydrolysis, alleles, reproduction fitness, males, Drosophila melanogaster 7474.
 development, larvae, Leptotrochus mali 8219
 development rate, Arctocornia carnaria, Callicornia producta 4265.
 diapause-induction diapause-termination, genetic control, Diatraea grandiosella 4076
 effects on abundance, pests, Schizaphis graminum, USA, Oklahoma 6922.
 effects on activity patterns, Aphis mellifera 4452
 effects on activity patterns, Formica neoclara, USA, Colorado 6863
 effects on adherence, filopodium elongation, leukocytes (granulocytic), Bombyx mori 8073
 effects on allotypes, loci, variation, Aedes aegypti 6238
 effects on body size, fecundity, Aedes dorsalis 8223
 effects on coloration, integument, Aphis smithi 7349
 effects on development, Chilo auriculus 9050
 effects on development, emergence, Rhagoletis indifferens 5834.
 effects on development, Epicauda atrata, Epicauda pestifera, Epicauda vittata, Epicauda immaculata, Epicauda occidentalis 9125.
 effects on development, fecundity, Spodoptera litoralis 7460.
 effects on development, Hylemyia platara 8239
 effects on development, Loxostege comitatus 1859.
 effects on development, parasites, Encarsia formosa, Trialeurodes vaporariorum 5823
 effects on development, parasites, Gonia cinerascens, Galleria mellonella 6772.
 effects on development, phenology, Spodoptera frugiperda 6031.
 effects on development rate, life history, Arthropoda 5833
 effects on development, reproduction, Chelindia vittiger 6644.
 effects on development, Schizaphis graminum 6485.
 effects on development, sexual reproduction, longevity, predators, Cybocephalus mucus, Cybocephalus nigripes nigripes 7505.
 effects on development, survival, Oligonychus subnudus, Oligonychus mulleri 8283.
 effects on diapause, Aetha acuminata 7461.
 effects on diapause, geographical variations, parasitoids, Leptophlebia bouldari, Drosophila melanogaster 6637.
 effects on diapause, morphogenesis, Attacus megastoma 5817.
 effects on diapause termination, Orus insignis 5816
 effects on diapause termination, overwintering eggs, Panonychus ulmi 8214.
 effects on egg production, Pteris rapae 7445
 effects on eggs encapsulation, parasites, Metaphycus swirskii, Saissetia oleae 5175
 effects on eggs hatchability, Bombyx mori 6652.
 effects on embryogenesis, diapause, Leptophyes punctatissima 8240.
 effects on emergence, pupae, Megachile roundata 8230.
 effects on feeding, growth, Coccinella septempunctata 5715.
 effects on flight activity, diurnal variations, Rhopalosiphum padi 7516.
 effects on flight activity, Ostrinia nubilalis, USA, Ohio 5124.
 effects on flight muscle mitochondria, lipid composition, Schistocerca gregaria 8105.
 effects on gene expression, life history, Drosophila melanogaster 7059
 effects on growth, development, Spodoptera frugiperda 556.
 effects on growth, survival, Triatoma sordida 9082.
 effects on hatching, incubation, eggs, environmental effects 4259.
 effects on host searching behavior, host plants, survival, Cydia pomonella 8277.

Temperature, (continued)

- effects on infectivity, *Anaplasma marginale*, *Dermacentor andersoni* 8137
 effects on insecticides efficacy, chemical control, stored products pests 5354
 effects on instars susceptibility, pathogens, *Bacillus*, *Aedes stimulans* 1817
 effects on larvae development, biological control, *Peris rapsae* 2942
 effects on larvae survival, *Epilachna varivestis* 6005
 effects on life cycle, sex ratio, colonies, *Elysiacus calceatus* 5078
 effects on lipid composition, phase transition, flight muscle mitochondria, *Schistocerca gregaria* 5709
 effects on metabolic rate, *Hydropsyche venularis* 4172
 effects on molting, survival, larvae, *Amblyomma americanum* 1860
 effects on molting, vectors, *Rhicephalus appendicularis* 2181
 effects on mortality, feeding, stored products pests, *Stilpnotus granarius* 6112
 effects on nuclear polyhedrosis virus infection, replication, *Bombyx mori* 1821
 effects on oviposition, survival, larvae, pupae, adults, *Patasson laemeeri* 9053
 effects on oxygen consumption, ecophysiology, deserts, *Arthropoda*, *Insecta* 5710
 effects on polymorphism, brachypterism, macropterism, *Ptychopterus apterus* 7465
 effects on population density, predator-prey interactions, *Coleomegilla maculata*, *Myzus persicae* 6022
 effects on population dynamics, *Stomoxys calcitrans* 2148
 effects on population dynamics, *Stomoxys calcitrans* 7606
 effects on population growth, pests, *Toxoptera citricidis*, *Aphis citricola*, *Aphis gossypii* 7619
 effects on potato virus Y transmission, feeding behavior, *Myzus persicae*, *Macrosiphum euphorbiae* 7699
 effects on predation, *Calitethus fasciata* 6690
 effects on predation, eggs, *Solenopsis invicta*, *Heliothis virescens* 9127
 effects on productivity, *Drosophila affinis*, *Drosophila albanus*, *Drosophila aethasica* 4445
 effects on rearing, *Trichogramma brasiliensis*, *Coryca cephalonica*, eggs 7450
 effects on recombination variability, *Drosophila melanogaster* 5449
 effects on respiration, fecundity, development, *Bruchidae* 4286
 effects on respiration, metabolism, *Rhagoletis pomonella* 8996
 effects on sexual behavior, *Amyelois transitella* 5838
 effects on survival, fecundity, *Psaridra peregrina* 7504
 effects on survival, oviposition, *Patasson laemeeri* 5082
 effects on toxicity, insecticides, permethrin, fenvalerate, deltamethrin, *Trichoplusia ni*, *Spodoptera frugiperda*, *Heliothis virescens* 8206
 effects on transcription, heat shock genes, *Drosophila melanogaster*, *Drosophila simulans* 7834
 effects on transmission, *Erwinia carotovora*, *Drosophila melanogaster* 3424
 effects on transmission (transovarial), *California encephalitis virus*, *Aedes dorsalis*, *Aedes melanion* 9236
 effects on ventilatory behavior, *Erythemis simplicicollis* 5876
 eggs, development, *Enallagma ebrium*, *Enallagma vernale* 7025
 environmental effects, development, diapause, *Cirphis unpunctata*, *Laphygma exigua*, *Plusia gamma* 7470
 environmental effects, development, larvae, Pupae, caste differentiation, *Polistes foederatus* 4315
 environmental effects, diapause, *Pectinophora gossypiella* 1096
 environmental effects, food consumption, wood, pests, *Hyloterpes bajulus* 2000
 environmental effects, resting behavior, diurnal variations, physical activity, *Diptera* 4316
 environmental factors, diapause, overwintering eggs, *Euxoa sibirica*, Japan, Toboku 7438
 environmental factors, flight activity, wind, food, *Schistocerca gregaria* 1171
 environmental factors, pupation, site selection, population studies, *Drosophila nigrospruata*, *Drosophila mettleri* 8375
 feeding behavior, *Lucilia sericata* 7506
 gene expression, *Chironomus* 9398
 glycogen phosphorylase, glycogen synthase, activity, fat body, *Philosamia cynthia* 6563
 growth, development, fecundity, predation, mathematical models, *Adalia bipunctata* 6018
 habitat preferences, environmental effects, survival, molting, larvae, *Ixodidae* 1175
 induction Balbiani rings, chromosomes, *Chironomus thummi* 7827
 long-term effects, climatic conditions, development, *Pterostichus nigrita* 7443
 mating behavior, environmental factors, *Ascia monuste orseis* 5104
 pest control, stored products, *Rhyzopertha dominica*, *Stilpnotus oryzae* 6928
 phosphate degradation, soil, bioassays, *Drosophila melanogaster* 7402
 population dynamics, host-parasite interactions, *Phytomyza ranunculii*, *Chrysoschista penitens*, *Diglyphus pusztensis* 7577
 receptors, antennal sensilla, *Speophyes lucidulus* 4979
 regulation, reproduction cycles, *Armadillidium vulgare* 7446
 relative humidity, environmental effects, development, mortality, *Coryca cephalonica* 1127
 relative humidity, environmental effects, survival, fecundity, *Epilachna varivestis* 1166
 sex ratio, effects of, physical activity, life span, *Musca domestica* 429
 simulation, methodology, laboratories 1684
 stored products, *Triticum*, effects on survival, fecundity, *Stilpnotus oryzae* 6977
 threshold, development, *Micromus tasmaniae* 1111
 winter, effects on activity patterns, *Dermacentor variabilis* 7587

Temperature effects, (continued)

- development, nymphs, eggs, *Orius insidiosus* 1865
 development, oviposition, *Pendromora saucia* 2685
 development, *Pala rosae* 2697
 development, survival, *Ctenocephalides felis* 359
 development, survival, *Haematobia irritans irritans* 2692
 developmental stages, mortality, *Oulema melanopus* 1112
 diapause, pupae, hormones, *Heliothis punctiger* 2679
 disease transmission, *Africa trypanosomiasis*, *Glossina*, Uganda, Kenya 1347
 duration, eggs, larvae, pupae, *Simulium nigritiae*, *Simulium adersi* 1483
 eggs, development, males, females, *Apis mellifera* 1878
 electrical properties, cuticle, *Vespa orientalis* 4118
 embryogenesis, parasitoids, *Macrocentrus grandis* 3489
 emergence, flight activity, *Cyclocephala* 1971
 emergence, overwintering, *Heliothis virescens*, USA, Arizona 1862
 emergence, species composition, *Chironomidae*, USA, Mississippi 750
 enzymatic activity, muscles, *Locusta migratoria*, *Blaberus fuscus* 2577
 factors affecting population regulation, mortality, *Dendroctonus ponderosa* 1299
 fecundity, sex ratio, *Chrysomphalus ficus* 1883
 feeding, growth, survival, larvae, *Heteronychus arator* 369
 flight activity, *Antisipera* 3276
 flight activity, *Lepidoptera* 1943
 flight muscle respiration, enzymatic activity, *Calliphora erythrocephala* 169
 growth, development, *Dermestes maculatus* 1871
 growth, development, geographical distribution strains, *Simulium decorum*, USA 2793
 growth, development, reproduction, *Lobesia botrana* 352
 growth, larvae, *Heteronychus arator* 369
 hatching, occurrence, seasonal variations, *Hypera postica*, Canada, Ontario 2775
 heat tolerance, survival, immature stages, mortality, *Rhyzopertha dominica* 365
 house dust entomofauna distribution, *Ptyrolyphidae*, Spain 575
 hydration, water content, acclimation, cryogenics, overwintering, larvae, *Eurosta solidaginis* 238
 infestation, host plants growth, *Eriophyes medicaginis*, *Medicago sativa* 2854
 larvae fungal flora toxicity, *Fusarium*, *Tenebrio molitor* 996
 larvae, pupae, development, diets, *Dacus oleae* 372
 life cycle, oviposition, development, *Acartichis intermedia* 2686
 life history, *Dermacentor silvarum* 475
 life span, life cycle, *Telenomus euproctides*, China, People's Rep., Hunan Province 2792
 lipid metabolism, diapause, *Diatraea grandiosella* 1101
 locomotor activity circadian rhythms, *Hemidemia thoracica* 155
 longevity, fecundity, parasitoids, *Patasson laemeeri* 2817
 mating behavior, *Cnaphalocrocis medinalis* 1138
 mating behavior, fecundity, molting, *Ephestia cautella*, *Plodia interpunctella* 1874
 mating behavior, feeding behavior, *Stomoxys calcitrans* 1176
 mating behavior, females calling behavior, males response, *Chilo suppressalis* 3531
 metabolism, enzymatic activity, overwintering, *Eurosta solidaginis* 4255
 mortality, eggs, *Entomoscidea americana* 2876
 mortality, parasitism, *Galleria mellonella* 1814
 mortality, *Rhyzopertha dominica* 237
 nest building, oviposition, *Dendroctonus frontalis* 1879
 oviposition, *Aphytis melinus*, *Aphytis lingnanensis* 2166
 oviposition, *Lissonotus oregonensis* 3492
 oviposition, longevity, hatchability, *Anticarsia gennatus* 1934
 oviposition, neuroendocrine system, *Dysdercus koenigi* 4260
 oxygen consumption, flight activity, *Malacosoma americanum* 891
 oxygen consumption, workers, *Atta laevigata*, *Atta sexdens rubropilosa* 4174
 parasites, infestation, *Nematoda*, *Cephalcia lariciphila* 2959
 pathogenicity, *Bacillus sphaericus*, *Culex fatigans*, *Anopheles subpictus* 2638
 pathogens infectivity, *Culicoides*, *Anopheles hillei* 1039
 pests, flight, emergence, spring, *Ostrinia nubilalis* 2102
 pest control, *Malus domestica* 1385
 pesticide resistance, malathion, susceptibility, *Oryzaephilus surinamensis* 1058
 polymorphism, frequency, developmental stages, *Chaoborus americanus* 568
 polyplodization, *Bombyx mori* 1520
 polytene puffing, larvae, hibernation, *Chironomus plumosus* 761
 population dynamics, *Myzus persicae* 1275
 predator-prey interactions, feeding behavior, egg production, *Coccinella californica*, *Coccinella fasciata*, *Acyrtosiphon pisum* 2878
 pupae storage, adults longevity, flight activity, *Cochliomyia hominivorax* 1868
 y-radiation mortality, *Pogonomyrmex owyhee* 1167
 reproduction, longevity, *Anthonomus grandis* 1105
 respiration, diapause, *Argiope aurantia* 1097
 rhythms, enzymes, β -glucosidase, digestive tract, *Halicta cerulea* 1745
 seasonal variations, population dynamics, mathematical models, *Heteronychus arator*, New Zealand, North Is. 1302
 simulation, development, emergence, *Papilio japonica* 367
 storage, fecundity, survival, *Amblyomma americanum* 1129
 storage, spermatogenesis, *Gastrophysa arcuata* 1856
 survival, population growth, *Anthonomus grandis* 3641
 toxicity, fungicides, *Acari* 1045
 trail following behavior, *Iridomyrmex purpureus*, Australia 3546
 water balance, *Dermatophagoides farinae* 2605
 water stress, hemolymph, chemical composition, *Spodoptera exigua* 4173
 weather, flight activity, *Dendroctonus frontalis* 1169
 winter, larvae, mortality, *Ixodes ricinus*, Ireland 1126

Temperature perception

receptors, ultrastructure, *Periplaneta americana* 146

Temperature requirements

- development, parasites, *Microctonus athiopoides* 391
 development, sexual reproduction, *Lissonotus oregonensis* 3492
 development, *Tetranychus urticae* 3555

Temperature tolerance

- acclimation, habitat preferences, *Cryptophanes* 1191
 life cycle, *Aulacophora foveicollis* 9106
 longevity, apiculture, *Apis mellifera* 2213
 overwintering, *Cyclocephala* 1971
 seasonal variations, *Alaskozetes antarcticus*, *Cryptopygus antarcticus*, Belgium, Antarctica 1189
 thermoregulation, and zones, *Geocoris punctipes*, *Lygus hesperus* 5707

Temperature-sensitive

immature stages, *Plodia interpunctella* 363

Temperature-sensitive mutant.

developmental genetics, RNA polymerase II, *Drosophila melanogaster* 9418.
follicles morphology, *Drosophila melanogaster* 3099
gene (Sucre), gene mapping, chromosomes, *Drosophila melanogaster* 7853
genetics, development analysis, *Drosophila melanogaster* 3102
gynandromorphs, sex determination, loci, gene expression, *Drosophila melanogaster* 7824

oogenesis, vitellogenesis, *Drosophila melanogaster* 2334.

phenotypes, mortality, *Drosophila melanogaster* 1533

lipid biosynthesis, gene expression, protein biosynthesis, chromosomes

lipid biosynthesis, *Drosophila melanogaster* 8641

shibire locus, gene conversion, *Drosophila melanogaster* 9399.

tetradotoxin binding, sodium channels, axons, *Drosophila* 9415

Temporal variations.

population numbers, interspecific relationships, horses, *Tamias* 1376

spatial distribution, eggs, oviposition, *Cossypium*, *Heliothis armiger* 1154

territory, foraging behavior, *Myrmecocystus mimicus* 1999

Tenebrio.

dehydration survival, osmoregulation, water balance 236.

electric currents, skeletal muscle 892.

ovary, ultrastructure, cytoplasm transport 1077.

Tenebrio molitor.

acdegans, glands, anatomy, histology, secretion, males 4181.

antenna, development, cuticle, epidermis, nerves, larvae 9043

antifreeze proteins, purification, amino acid composition 5688

control, protein biosynthesis testes, juvenile hormones, ecdysterone 386.

development, proteins, testes 3520.

electrochemistry, electric currents, skeletal muscle 116.

larvae, antifreeze proteins, purification, amino acid composition 8100.

larvae, fungal flora toxicity, temperature effects, *Fusarium* 996.

malpighian tubules, ultrastructure, segments, comparison, *Blattella germanica* 6548.

mating behavior, males, females attractiveness, age 7488.

metamorphosis, epidermis cell cycle 1086

myotomins, diets protein composition, effects on growth 1113.

phagocytosis, epithelium, midgut, larvae, cytology 103.

protein biosynthesis, vitellins, vitellogenins 7313.

queens chemical extracts, *Apis mellifera*, effects on fecundity 8226.

visual evoked response, head movements, nystagmus 151.

Termitidae.

abundance, soil fauna, agricultural ecosystems, Egypt 7011.

activity patterns, diel variations, seasonal variations, body temperature,

weather, USA, Washington 8274.

capture-recapture studies, seasonal variations, population density, survival 595.

chromosomes, ultrastructure 9409.

cuticle, hydrocarbons 1730.

development 9043.

new genera, new species, taxonomy, morphology, South America 7949

surveys, geographical distribution, Asia 781.

taxonomy, classification systems 4794

Tenebroides mauritanicus.

eggs, chorion, ultrastructure 6489

Tenebroides aridifolia sinensis,

predation, *Cricetidae* 2803.

Tenebroides aridifolia sinensis.

life history, limiting factors, food availability 2906.

Tenthredinidae.

new records, geographical distribution, British Isles 7886

taxonomy, morphology, USSR 4102.

Tenthredo.

taxonomic revision, nomenclature, Finland 7209

Tenthredo obsoleta.

new records, geographical distribution, British Isles 7886.

Tenthredo pamirensis pamirensis.

taxonomy, morphology, USSR 4102.

Tenucephalus hamatus.

new species, taxonomy, morphology, South America 7982

Tenuipalpus coimbatorensis.

new species, India 8715

Tenuipalpus cupressoides.

new species, taxonomy, Israel 8724

Tenuipalpus ghali.

new species, India 8715.

Tenuipalpus laminasetae.

new species, India 8715

Tenuipalpus malligai.

new species, India 8715

Tenuipalpus tectoniae.

new species, India 8715

Tenuipalpus pareritophoides.

new species, taxonomy, Israel 8724

Tepa.

chemosterilization, pest control, *Dermatobia hominis* 5351

effects on cytology, ovary, testes, *Lysanthes* 3504

insecticides, histopathology, oogenesis, pest control, *Culex pipiens fatigans* 1835

topical application, chemosterilization, *Scolytus multistriatus* 8234

Tephritidae.

attractancy, lures, ammonia, Australia 3741

food organisms, nest provisioning, *Crabro advena* 438

Tepuidessus breweri.

new species, new genera, Venezuela 3184

Terms obtusana.

taxonomic revision, synonymy, *Perones fuscana*, Finland 7222

Teratogenesis.

morphology, *Thrasys fatus*, USA, Colorado 3263

proccene effects on development, *Cimex lectularius* 374

Teratology.

morphology anomaly, head, thorax, *Tingidae*, Czechoslovakia 3256

morphology, *Tachinus axillaris*, *Staphylinidae* 1719

Tergites.

embryogenesis, *Drosophila* 5813

Termination.

dapsue, eggs, soil temperature effects on, *Delia coarctata* 3473

Termini.

abdomen, morphology, *Megaselia*, North America 2415

Terminology.

collections, acronyms, museums, World 7925

fibris, muscles, larvae, *Lepidoptera* 2521

lipids=proteins, *lipophorus*, hemolymph, insecta 94

morphology, *Blattella* 804

morphology, larvae, *Trombiculidae* 4101

taxonomy, *Glyptotendridae* 5605

Trichogramma perkinsi, USA, Hawaii 4021

wings, veins, *Ephippigerinae* 72

Termitaria.

construction, colonies, development, *Odontotermes formosanus* 2781

nest-building (non-reproductive), workers, *Apicotermes lamani* 6990

new species, parasites, *Isoptera*, Australia 9005

Termitidae.

control programs, biophysics, reviews 738

Termitomyces.

symbiosis, inoculation, colonial characteristics, *Macrotermutinae* 2809

Terpenoid lactones.

juvenile hormones analogues, effects on morphogenesis, *Lapaphis erysimi* 6641

Terrestrial ecosystems.

surveys, information centers, Insecta, British Isles 2120.

Terrestrial environments.

surveys, *Oniscidea*, Poland 788

Terrestrial behavior.

aggressive behavior, *Cordulegaster boltoni*, Germany, Fed. Rep., *Fichtelgebirge* 8617.

aggressive behavior, scent marking behavior, *Polistes nupha* 5156

aggressive behavior, *Vanessa atalanta* 6993

dispersal, *Calopteryx cornelia*, Japan, Fukuoka, Murori R 8612

food availability, population density, *Agelopsis aperta* 2908

interspecific relationships, silk repellents, *Dichyna*, *Mallos* 3839

males, *Cuterebra leprosa*, USA, California 582

nesting behavior, oviposition, *Platyphya caligata* 8614.

nesting behavior, *Phalindus barbatus* 9360

males, *Oxybelus sericeus* 1968

reproductive behavior, *Anthidium manicatum* 1177

size effects on, mating behavior, *Scaphophaga stercoraria* 410

spatial distribution, foraging behavior, colonies, *Pogonomyrmex badius* 2006

Vanessa atalanta 6993

Terrestrial behavior.

protection, females, copulation, mating behavior, *Hetaerina vulnerata* 4299

Territory.

foraging behavior, spatial variations, temporal variations, *Myrmecocystus mimicus* 1999

Tertiary.

livestock, new species, *oviparum*, *Elektrophys* *lindrothi* 792

Terulia triangularis.

new species, taxonomy, morphology, Nicaragua 8805

Terulia wolai.

new species, taxonomy, morphology, Panama 8805.

Tesseratoma javanica.

sound production (biological), stridulation mechanisms 263.

Tesens.

cytology, degeneration, *tepa*, *Dysdercus cingulatus* 2694

development, spermatogenesis, *Calpodus ethius* 9065

development, spermatogenesis, cell cycle, *Dermacentor variabilis* 2719.

development, spermatogenesis, *Papilio xuthus* 4272.

lipid biosynthesis, *Triatoma infestans* 191.

protein biosynthesis control, juvenile hormones, ecdysterone, *Tenebrio molitor* 386.

proteins, development, *Tenebrio molitor* 3520

Testis.

apical tissue, histology, *Leptinotarsa decemlineata* 7427.

Testastrichs hagenowii.

host-parasite interactions, host specificity, *Blattella orientalis*, *Periplaneta americana*, *Blattella germanica* 504

Tetanocera breviviridis.

synonymy, *Tetanocera brevisetosia* 5572

Tetanocera brevisetosia.

synonymy, *Tetanocera breviviridis* 5572

Tetanocera brunneipennis.

synonymy, *Tetanocera ferruginea* 5572.

Tetanocera ferruginea.

synonymy, *Tetanocera brunneipennis* 5572.

Tetanocera griseicollis.

synonymy, *Tetanocera ornatifrons* 5572

Tetanocera montana.

geographical distribution, morphology, Belgium 9485

Tetanocera ornatifrons.

synonymy, *Tetanocera griseicollis* 5572

Tetanocera myopaeformis.

pest resistance, host plants, *Beta vulgaris* 9350.

Tetras lanceolatus.

new species, taxonomy, morphology, India 7137

Tetrademidae.

taxonomic revision, morphology, genitalia 4767.

Tetrachlorophosphos.

insecticides, ear tags, cattle, chemical control, *Musca autumnalis*, *Haematobia irritans* 9257

Tetractinospora victoris.

parasites, life history, morphology, *Ceragrion coromandelianum* 2630.

Tetracyclus borvici.

taxonomy, morphology, activity patterns, thorax 2452.

Z-9-E-12-Tetradecadien-1-yl acetate.

synthetic sex pheromone, electroantennograms, sensilla trichodea, *Spodoptera* eximpta 7344

Z-9-Tetradecen-1-yl acetate.

synthetic sex pheromone, electroantennograms, sensilla trichodea, *Spodoptera* eximpta 7344

(E)-11-Tetradecenyl acetate.

sex pheromone, attractants, *Sperchia intractana* 1933.

(Z)-11-Tetradecenyl acetate.

sex pheromone, attractants, *Sperchia intractana* 1933.

(Z)-12-Tetradecenyl acetate.

sex pheromone, chemical composition, *Ostrinia furnacalis* 1781.

- Z-11-Tetradecanyl acetate**, sex pheromone, chemical composition, *Mamestra pisi* 228.
- Z-9-Tetradecanyl acetate**, sex pheromone, chemical composition, *Mamestra pisi* 228.
- Tetradifol**, pesticide resistance, genetic analysis, *Panonychus ulmi* 7870
- Tetragastha**, airborne dispersal, coastal environment, Japan, East China Sea 2101.
- predators, insecticides effects on, pest control, *Nilaparvata lugens* 6162
- Tetragastha boninensis**, new species, morphology, 1593.
- Tetragasthaeidae**, webs, food organisms escape behavior, *Lepidoptera* 454.
- Tetrahymena**, parasites, infection; *Chironomidae*, America, Great Lakes 3608
- Tetrahymena rotunda**, parasites, new species, *Simulium*, USA, New York 1014
- Tetratophia euphemelia**, emergence, overwintering, life cycle, host plants, *Prosopis*, USA, Texas 5961
- Tetranorium armatum**, new species, taxonomy, morphology, Mongolia, People's Rep. 8678.
- Tetranorium caespitum**, anti-predator behavior, soil-dropping behavior, *Halicidae* 9119.
- pest control, orchards, *Prunus amygdalus*, USA, California 6907.
- pheromones, biochemical characteristics 3348.
- soil-dropping behavior, interference competition, *Nomia melanderi* 5891
- Tetranorium ferox**, new species, taxonomy, morphology, Mongolia, People's Rep. 8678
- Tetranorium imparum**, food sources, recruitment, chemical communication, pheromones 3840
- pheromones, biochemical characteristics 3348
- Tetraneura**, association, mycorrhizas, *Imperata cylindrica*, India 7802.
- Tetranodus niveicollis**, host plants, geographical distribution, USA, Texas 1944.
- Tetranychidae**, cages, materials 6473.
- chromosomes, karyotypes, taxonomy 3086.
- ectoparasites, ecological distribution, *Prunus amygdalus*, USA, California 1391.
- food organisms, predation, activity patterns, *Coniopteryx esbenpeterseni* 6847.
- pest control, integrated control, orchards, *Malus pumila* 8517.
- pests, dispersal, crop fields 6976.
- Tetranychidae urticae**, population-environment relations, infestation, *Fragaria vesca* 2060
- Tetranychidae**, geographical distribution, new records, India 7910.
- geographical distribution, new records, India, Punjab 7912
- new species, taxonomy, association crop fields, India 8716.
- Tetranychus arabicus**, cross-breeding, fertility, *Tetranychus urticae* 7880
- infestation, effects on yield, *Gossypium* 6961.
- Tetranychus cianna bariensis**, host plants effects on webs, silk 2841
- Tetranychus ciannabariensis**, distribution, host plants, *Codiaeum variegatum* 2084
- webs spinning, insecticides effects on 1048.
- Tetranychus desertorum**, oviducts, cycloparae, bioassays 7398
- Tetranychus evansi**, pathogens, infection, population regulation, *Triposporium*, Brazil 4197.
- Tetranychus kazawai**, enzymatic activity, biodegradation, pesticides (organophosphorus), malathion, pesticide resistance, synergism 3449.
- ovicides, cycloparae, bioassays 7398.
- pesticide resistance, pesticides (organophosphorus), esterase activity, substrate specificity 7407.
- Tetranychus mcandalei**, pests, fruits damage, cytology, *Malus* 5403.
- Tetranychus neocaledonicus**, new records, host plants, *Tagetes erecta*, India, Punjab 6804
- removal, host plants, wind 7775.
- Tetranychus pacificus**, ectoparasites, ecological distribution, *Prunus amygdalus*, USA, California 1391
- Tetranychus telarius**, insecticides, acaricides, malathion, diazinon, ethyl parathion, fenitrothion, efficacy 7794.
- Tetranychus turkestanii**, ectoparasites, ecological distribution, *Prunus amygdalus*, USA, California 1391.
- insecticides effects on population levels 2893
- Tetranychus urticae**, antibiotics resistance, toxicity, milbemycin 1838.
- biological control, natural enemies, predator-prey interactions 8709.
- biological control, predation, *Coniopteryx esbenpeterseni*, Italy 2813
- biological control, predators effects on, *Chermes limonicus* 1265.
- biological control, predators, pesticides effects on, *Phytoseiulus persimilis* 3766.
- chemical control, milbemycins, toxicity 2662
- chemical control, pesticides, pesticide resistance, British Isles 2980
- cross-breeding, fertility, *Tetranychus arabicus* 7880.
- cross-resistance, host plants defense mechanisms, pesticides 6284.
- development, temperature requirements, life tables, reproduction 3555.
- diapause, circadian rhythms, photoperiods effects on 3483.
- diapause induction, effects on, photoperiods, geographical variations, malathion 1095.
- digestive tract, ultrastructure, histology 2546.
- ectoparasites, ecological distribution, *Prunus amygdalus*, USA, California 1391
- feeding, leaves damage, host plants 7764.
- food chains acute toxicity, acaphate, *Phytoseiulus persimilis* 309
- glands, proosomal glands, ultrastructure 3269.
- infestation, effects on crop yield, *Fragaria vesca* 3776.
- infestation effects on foliage nutrients, *Arachis hypogaea* 3794
- infestation effects on host plants growth, photosynthesis, *Fragaria vesca* 6163
- insecticides, diflubenzuron, metabolism 1390.
- karyotypes, population genetics, simulations, mathematical models 1549
- ovicides, cycloparae, bioassays 7398.
- pathogens, effects on population decline, *Neozygites floridana* 8400.
- Tetranychus urticae**, (continued)
- pest control, acaricides, milbemycins, antibiotics, *Streptomyces hygroscopicus* aureolacrimosus 5309.
- pest control, chemosterilants 4575.
- pest control, predation, *Phytoseiulus macropilis*, *Phytoseiulus persimilis* 2205.
- pest control, predators, *Phytoseiulus persimilis*, British Isles 3023.
- pest control, sampling methodology, crop fields, *Mentha piperita* 8505.
- pest resistance, breeding, genetic factors, *Fragaria ananassa* 554.
- pest resistance, horticulture, *Impatiens* 5199.
- pesticide resistance, biodegradation, parathion, parathion 308.
- pesticide resistance, dicofol, metabolism 1840.
- pesticide resistance, selection, azinphosmethyl 3128.
- pests, infestation, damage, *Fragaria* 6200.
- population dynamics, predator-prey interactions, *Phytoseiulus persimilis* 2882.
- predator-prey interactions, *Amblyseius fallacis* 560.
- predator-prey interactions, *Galenodromus longipilis*, *Neoseiulus fallacis*, *Phytoseiulus macropilis*, *Proprioseiopsis tamperellus* 362.
- prey, kairomones, effects on predatory behavior, *Amblyseius fallacis*, *Phytoseiulus macropilis* 2156.
- spatial distribution, population density, predators, *Phytoseiulus persimilis* 3625.
- toxicity tests, pesticides, rearing, methodology 7387.
- Tetrapoda femoratus**, dispersal, movements, spatial distribution, sexual dimorphism 6816.
- Tetrapoda tetrophthalmus**, dispersal, movements, spatial distribution, sexual dimorphism 6816.
- mate selection, body size, breeding success 4298.
- Tetrapoda tetrophthalmus**, flight, dispersion, measuring techniques 2099.
- seasonal variations, dispersal, flight activity, USA, Vermont, USA, New Hampshire 443.
- Tetraploidy**, eggs size, *Bombyx mori* 3088.
- Tetrastichus ayari**, parasites, suitability tests, *Chilo auriculus* 1217.
- Tetrastichus cecidobroter**, new species, taxonomy, morphology, USA, California 7963.
- Tetrastichus endemius**, parasitoids, host-parasite interactions, ecological distribution, altitude, *Coleophora alticola* 4371.
- Tetrastichus malacosomae**, parasitoids, infestation, eggs mortality, *Malacosoma americanum* 8314.
- Tetrastichus schoenobii**, parasites, oviposition, hosts kairomones effects on, *Tryporyza incertulas* 1218.
- Tetrathemis polieni**, geographical distribution, Africa 7906.
- oviposition, substrate preferences, egg production 6673.
- Tetrix undulata**, females, diapause, endocrine function, *Cortica allata*, vitellogenesis 3481.
- new records, geographical distribution, Switzerland 9465.
- Tetrodontophora bielensis**, embryogenesis, ultrastructure, germ cells 7428.
- transport epithelium, tubus ventralis, histology, ultrastructure 4947.
- Tetrodotoxin**, binding, sodium channels, axons, temperature-sensitive mutant, *Drosophila* 9415.
- Tetrigonia cantans**, geographical distribution, habitat, German Dem. Rep. 7904.
- neurophysiology, mechanoreceptors, auditory perception 7293.
- Tetrigonia viridissima**, geographical distribution, habitat, German Dem. Rep. 7904
- Tetrigonidae**, auditory perception, sense organs, functional morphology 3295.
- ear, auditory perception, mechanical properties, tympanum, acoustic trachea 4977.
- Tetraya bipunctata**, chemical control, pest control, *Pinus strobus*, USA, North Carolina 2982.
- Texocoris scutellus**, synonymy, *Parthenicus nigrellus* 5581.
- Thagria barbatula**, new species, taxonomy, morphology, Sarawak 8808.
- Thagria bidentata**, new species, taxonomy, morphology, Sumatra 8808.
- Thagria bifurcata**, new species, taxonomy, morphology, Sarawak 8808.
- Thagria fossiata**, new species, taxonomy, morphology, Borneo 8808.
- Thagria holowayii**, new species, taxonomy, morphology, Sarawak 8808.
- Thagria mutabilis**, new species, taxonomy, morphology, Sarawak 8808.
- Thagria retrorsa**, new species, taxonomy, morphology, Sarawak 8808.
- Thailand**, defoliation, infestation, *Avicennia alba*, *Cleora injectaria* 2853.
- infection, *Rickettsia tsutsugamushi*, *Trombiculidae* 8135.
- life history, population dynamics, pest control, *Atherigona soccata* 4568.
- morphology, identification keys, taxonomy, *Anopheles* 6479.
- nests, social behavior, *Vespa affinis* 2281.
- new species, new genera, taxonomy, morphology, *Niphanchele bannae* 7187.
- new species, taxonomy, *Jenkinsheila tokunagai* 3200.
- new species, taxonomy, morphology, *Goera schmidti* 8005.
- new species, taxonomy, morphology, *Zepedanulus watanabei*, *Heterogastrella bisenata*, males, *Paktongus distinctus* 5550.
- oviposition, substrate preferences, *Aedes aegypti* 5846.
- pest control, insecticides, crop protection, *Gossypium*, *Amaranthus devastans*, *Aphis gossypii*, *Heliothis armigera*, *Bemisia tabaci* 4622.
- sacbrood virus, antigenic characteristics, isolates, *Apis cerana* 5727.
- strike, man, *Parasarcophaga ruficornis* 4499.
- surveys, pests, houses, *Blattidae* 6066.
- Thailand, Bangkok**, biting cycles, blood meals, *Culex quinquefasciatus* 6060.
- Thalaina**, taxonomy, morphology, New South Wales 3222.
- Thalaina kimba**, new species, taxonomy, morphology, New South Wales 3222.
- Thalainodes**, taxonomy, morphology, New South Wales 3222.

- Thallium**,
inhibition, potassium active transport, midgut, *Hyalophora cecropia* 8074
- Thanasimus dubius**,
pests, pheromone traps, efficacy 2194.
- Thanasimus dubius**,
activity patterns, diurnal variations, measuring techniques 1742.
food preferences, oviposition 6014
overwintering, emergence, flight activity 9084
pupae, spatial distribution, *Pinus taeda*, *Pinus echinata* 2082
- Thanasimus femoralis**,
pheromones, biochemical analysis, synergism, chemotaxis, predator-prey interactions, lps typographus 422.
- Thanasimus formicarius**,
pheromones, biochemical analysis, synergism, chemotaxis, predator-prey interactions, lps typographus 422.
- Tharra angusta**,
new species, taxonomy, morphology, Australasian Region 8807
- Tharra ciliata**,
new species, taxonomy, morphology, Australasian Region 8807
- Tharra epidentata**,
new species, taxonomy, morphology, Australasian Region 8807.
- Tharra humala**,
new species, taxonomy, morphology, Australasian Region 8807.
- Tharra hammeri**,
new species, taxonomy, morphology, Australasian Region 8807.
- Tharra laeoculata**,
new species, taxonomy, morphology, Australasian Region 8807.
- Tharra sarawakensis**,
new species, taxonomy, morphology, Oriental Region 8807.
- Tharra triplinata**,
new species, taxonomy, morphology, Australasian Region 8807.
- Thaumalea alpina**,
new species, taxonomy, morphology, Europe 2428.
- Thaumalea toscana**,
new species, taxonomy, morphology, Europe 2428.
- Thaumetopoea pityocampa**,
contact dermatitis, case reports, man 3694
- Thaumetopoea pityocampa**,
pest control, efficacy, insecticides, *Bacillus thuringiensis* 3833.
- Thecophora ruffroni**,
new species, taxonomy, morphology, Argentina 6392.
- Theileria**,
disease transmission, role, salivary gland, Ixodidae 2917.
infection, detection methodology, *Rhipicephalus appendiculatus* 8133.
- Theileria annulata**,
pathogens, infectivity, *Hyalomma excavatum* 6607.
- Theileria mutans**,
transmission, *Amblyomma hebraeum*, South Africa 665.
- Theileria parva**,
host-parasite interactions, salivary gland, ultrastructure, *Rhipicephalus appendiculatus* 256.
infection, vectors, East coast fever, *Rhipicephalus appendiculatus* 2181.
parasites, radioactive labelling, *Rhipicephalus appendiculatus* 3415.
parasites, salivary gland, sporogony, ultrastructure, *Rhipicephalus appendiculatus* 9007
- Theileria sergenti**,
livestock infection, pest control, imidacarb dipropionate, primaquine 3682
- Theileria taurotragi**,
livestock pathogens, vectors, *Rhipicephalus appendiculatus* 3657
- Theileriidae**,
vectors, livestock, *Rhipicephalus appendiculatus* 3657
- Thelastoma bulbosae**,
parasites, digestive tract, diurnal variations, abundance, *Periplaneta americana* 2642.
- Thelastomatidae**,
new records, parasites, Arthropoda, India, North 8390
- Thermes aenealis**,
host plants, pupae distribution, *Hypocystis adiantae*, *Xoia arctus* 1244
- Therobaldia longearcolata**,
larvae, sensitivity, pesticides (organophosphorus), abate, fenitrothion, malathion 8192
- Therobrona caeco**,
pollination, environmental effects, shade, breeding sites, *Forcipomyia* 4267
- Thera albionigrata**,
new species, taxonomy, morphology, Hungary 7995
- Theraphosidae**,
taxonomy, morphology, Costa Rica 3173
- Therapy**,
allergic diseases, house dust, man, *Dermatophagoides pteronyssinus* 7634
bites, case reports, Arachnida 668
skin diseases, infestation, man, Arthropoda 8412
- Theridiidae**,
airborne dispersal, coastal environment, Japan, East China Sea 2101
- Theridion autisi**,
new species, taxonomy, morphology, Czechoslovakia 8737.
- Therioaphis maculata**,
pest resistance, host plants, *Medicago sativa* 5324
survival, reproduction, environmental stress, host plants, *Medicago sativa* 9168
- Therioaphis trifolii**,
biological control, parasites, *Trioxys complanatus*, Australia, South Australia 3821.
effects on cultivars crop production, *Medicago sativa* 685
effects on, growth, seedlings, parasite resistance, *Medicago sativa* 549
host plants, pest resistance, antibiotics, *Medicago sativa* 7774
pests, bionomics, host plants, resistance, susceptibility, *Medicago sativa* 7757
- Therioaphis trifolii maculata**,
geographical distribution, factors affecting dispersal 1964
- Thermal stability**,
RNA polymerase II, comparison mutants, *Drosophila melanogaster* 7045
rRNA 5S, *Acyrtosiphon magnoliae* 4866
- Thermobia domestica**,
exocrine glands, epithelium, ultrastructure 3386
juvenile hormones, identification 3337
seminal fluid receptacles, ultrastructure transformation, molting 1076
viologenes, protein biosynthesis 6656
- Thermoctes sibleyi**,
new species, taxonomy, morphology 7953
- Thermoctes zimmermani**,
new species, taxonomy, morphology 7953
- Thermoregulation**,
circadian rhythms, *Coccinella septempunctata*, *Aphis* 8923
cuticle, blood flow, ecophysiology, *Sarcophaga* 6580
cuticle, electrical properties, temperature effects, diets, *Vespa orientalis* 3272
diurnal variations, movements, host plants, *Dactyloctenium aegyptium* 4319
energetics, flight, *Malacosoma americanum* 6524
energetics, overwintering aggregation, *Danaus plexippus*, USA, California 6844.
oxygen consumption, flight activity, *Malacosoma americanum* 891
poikilotherms, cold tolerance survival, *Alaskozetes antarcticus* 976
queens, broods, effects on colonies, *Theridion* 8590
role, thermoregulatory behavior, coloration, *Brachystola magna* 4171
solar radiation, webs, orientation, *Micrathena gracilis* 1918
swarms, energetics, *Apis mellifera* 240
thermoregulatory behavior, functional morphology, heat transfer, *Colias* 6582.
water relations, and zones, *Geokoria punctipes*, *Lygus hesperus* 5707.
- Thermoregulatory behavior**,
body temperature, *Euphydryas aurina* 6703
body temperature, *Leptinotarsa decemlineata* 5705
body temperature, *Xanthocheilus zealandica*, *Austrolestes colensoi*, *Procordulia smithi*, New Zealand 6701
migrations, population dynamics, *Danaus plexippus* 6846
nest building, *Trigona daniell* 2280
orientation, sunlight, *Frontinella communis* 463
orientation, sunlight, *Gynaephora rosii* 5906
posture, environmental factors, *Pentatomidae* 7503
role, thermoregulation, *Brachystola magna* 4171
temperature effects, *Stomoxys calcitrans* 1176
thermoregulation, heat transfer, *Colias* 6582
- Thiamine**,
repellents, pest control, *Canis familiaris*, *Siphonaptera* 7636.
- Thiobisformamide**,
insecticides toxicity penetration, *Diatraea grandiosella* 9030
- Thiobisformamides**,
topical application, penetration, metabolism, *Diatraea grandiosella* 4232
- Thiofanax**,
insecticides, systems, chemical control, *Bemisia tabaci*, *Empoasca kraemeri*, 6196
- Thiothempia**,
chemosterilization, pest control, *Dermatobia hominis* 5351.
- Thiolepa**,
chemical control, sterilization, pupae, *Culicoides nubeculosus* 1355.
- Thiolepa**,
chemosterilants, chemical control, pests, chemosterilization methodology, *Stomoxys calcitrans* 5353
chemosterilization, pest control, *Dermatobia hominis* 5351.
effects on ovary development, *Sarcophaga ruficornis* 356.
- Thiorea**,
repellents, pest control, *Dysdercus koenigi* 7340.
- Thissulidae**,
new records, predators, *Spodoptera litura*, India, Andhra Pradesh 1439.
- Thoracochirus decanus**,
new species, taxonomy, morphology, India, Sri Lanka 4809.
- Thorax**,
acetylcholinesterase activity, *Dacus cucurbitae* 7323.
activity, patterns, *Tetracyclus boreus* 2452
anatomy, teratology, *Tingidae*, *Czechoslovakia* 3256
development, bithorax genes, gene expression, *Drosophila melanogaster* 4674.
exoskeleton, muscles, morphology, larvae, *Manduca sexta* 8064
ganglia, central nervous system, embryo cells, mutants, *Drosophila* 8648.
ganglia, neurons, physiology, morphology, *Locusta migratoria* 8065.
gene expression, *Ultrabithorax* mutations, *Drosophila* 6272.
glucose levels, starvation detection, *Apis mellifera* 194.
leg segments, neurons morphology, defective mutant, *Drosophila* 896.
mechanoreceptors, sensilla, spatial distribution, *Schistocerca gregaria* 910.
morphology, sense organs, brush-organs, *Etiella zinckenella* 2511.
muscles, cell lines, development, origin, *Drosophila* 5814.
mutation, duplication patterns, *Drosophila melanogaster* 767.
sensilla, neurons, anatomy, mutants, *Drosophila* 4962
spiracles, ventilation, neurons, coordination, *Locusta migratoria* 5665.
- Thorectes**,
morphology, taxonomy, Nepal 807
- Thrasia fatus**,
teratogenesis, morphology, USA, Colorado 3263.
- Threpticus**,
morphology, taxonomy, India 7172
- Threshold**,
temperature, development, *Microtus tasmaniae* 1111.
- Threshold limits**,
pheromones, behavior response, males, *Grapholitha molesta* 420.
toxicity, insecticides, cypermethrin, *Heliothis armiger*, *Diparopsis castanea*, *Earias* 5389
- Thripidae**,
new species, taxonomy, morphology, *Chirothrips azoricus*, Azores 849.
- Thrips tabaci**,
abundance, sampling methodology, pests 4534.
damage, contamination, sauerkraut 8508
dispersion, aggregation, spatial distribution 4420.
- Thrips validus**,
midgut, peritrophic membrane, membrane structure, histochemistry 7312.
- Thrombosane A2**,
anti-hemostatic components activity, saliva, blood meals, *Rhodnius prolixus* 7361.
- Thuja occidentalis**,
pollination, food sources, *Apis mellifera*, USA, Connecticut 4400.
- Thuja plicata**,
leaves, oils, plant extracts, antifeedants, *Pissodes strobi*, *Alta ambians* 4352.
- Thysanella acerata**,
host plants, crop fields, *Sorghum vulgare* 2097
- Thysanella calceata**,
photoperiod, effects on dimorphism, color, pubescence, rearing 5092.
- Thylodius contractus**,
morphology, life cycle, geographical distribution 1703.

- Thymelicus lineola**,
geographical distribution, occurrence records, Canada, Manitoba 3159.
host-parasite interactions, pest control, biological control, pathogens,
Zophophora radicans, Entomophthora egressa 3420
- Thymidine**,
incorporation, DNA biosynthesis, diflubenzuron effects on *Stomoxys calcitrans*,
1512.
- Thyrbocrestus**,
species composition, USSR, Siberia 7106
- Thyreoxenus orthodorus**,
defense secretions, chemical composition, pygidial gland, New Zealand 247
- Thyreolepidia cinerea**,
synonymy, taxonomy, Centrophlebotomyia furcata, Israel 4002
- Thyreophagus vermicularis**,
new species, taxonomy, morphology, British Isles, Scilly Is 8729
- Thyridopteryx ephemeriformis**,
chemical control, permethrin 2197.
 β -D-glucopyranosyl-O-L-tyrosine, biochemistry, development, larvae 6519
sex differences, segregation, habitat selection, parasitism, larvae 4444
spines, morphology, abdomen, pupae 8877.
- Thysanoptera**,
abundance, construction disturbance effects on 1284
geographical distribution, surveys, traps, Hungary 3156
morphology, head, evolution 3134.
new records, species composition, forests, ornamental plants, Israel 9479.
overwintering, ecological distribution, population density, USA, Illinois 9367.
pests, pest control, abundance, *Pteris frutis* 1454.
- Thysanocera**,
microtubules, epithelium, ultrastructure 4117
- Tibellus oblongus**,
food preferences 1197
- Tibia**,
cell surface, antigenic characteristics, *Blaberus craniifer* 100
- Tibicen pruinosus**,
introduced species, occurrence, Eire 9451
- Tick-borne encephalitis**,
vectors, pest control, DDT, *Ixodes persulcatus*, USSR 9253.
- Tick-borne encephalitis virus**,
disease transmission, epidemiology, Ixodidae 9229
disease transmission, epidemiology, mathematical models, Ixodidae 9248
disease transmission, experimental infection, *Ixodes persulcatus* 9255
disease transmission, pest control, acaricides, *Ixodes persulcatus* 9252
vectors, survival, disease transmission, *Haemaphysalis inermis*, *Microtus minutus*
4491
- Tilachlidopsis catenulata**,
association, pathogens, *Paltiothyrus tarsatus*, Ivory Coast 6608
- Tillage**,
effects on emergence, *Heliothis zea*, *Heliothis virescens* 2247.
- Tilandisia**,
leaf litter, association, Collembola, Mexico 2167.
- Tilandisia utriculata**,
host plants, oviposition, bionomics, *Weyomyia vanduzeei* 2075.
- Timahocoris paululus**,
new genera, new species, morphology, Singapore 8802.
- Timonius**,
taxonomic revision, classification systems 4860
- Timberlakea gliva**,
new species, taxonomy, morphology, South Africa, Transvaal 8822
- Timberlakea signata**,
new species, taxonomy, morphology, South Africa, Transvaal 8822
- Time**,
development, cages effects on, *Drosophila melanogaster* 385.
development, geographical distribution effects on, *Apis mellifera* 375.
variation, population dynamics, mathematical models, Insecta 5239.
- Timing**,
flight muscle spikes, orientation effects on, Acrididae 150.
molting, spermatogenesis, *Dermacentor albipictus* 1885.
oviposition, molting, seasonal variations, *Boophilus annulatus*, *Boophilus*
microplus, parasites, cattle 1916
protein biosynthesis, oogenesis, *Drosophila melanogaster* 394.
- Tinea**,
taxonomy, synonymy 5111.
- Tinea columbaria**,
new records, geographical distribution, British Isles 5511.
- Tinea pellionella**,
oviposition sensilla, antennal sensilla, legs, ovipositor 3286.
- Tineidae**,
taxonomy, morphology 4053.
taxonomy, systematics, Spain, Portugal 2466.
- Tineola biselliella**,
pest control, feeding, clothing, permethrin 3796.
- Tingidae**,
flight activity, seasonal variations 1976.
morphology, nodules, sensors, abdomen, variation, taxonomy 8885.
new genera, new species, taxonomy, morphology, Africa 4856.
sense organs, morphology 4965.
taxonomy, morphology, Africa 1633.
taxonomy, morphology, surveys, Gambia, Senegal 4012.
teratology, head anomaly, Czechoslovakia 3256.
- Tingis**,
taxonomic revision, morphology, synonymy 4855.
- Tingis canariensis**,
new species, taxonomy, morphology, Canary Is., Tenerife 4855
- Tingis ottomana**,
new species, taxonomy, morphology 8804
- Tingis seidenstueckeri**,
new species, taxonomy, morphology, Turkey, Anatolia 4855.
- Tinissa classiei**,
new species, taxonomy, morphology, Borneo 4053.
- Tinissa yaloma**,
new species, taxonomy, morphology, New Britain 4053.
- Tinocallis caryae-foliae**,
chemical control, trunk injection, trees, *Carya illinoensis* 8566
- Tinocallodes montanus**,
karyotypes, chromosomes, India 7842.
- Tinodes israelica**,
morphology, Lebanon 4066.
- Tinolestes**,
taxonomic revision, morphology, palpus 6407.
- Tiphidae**,
mating behavior, chemical communication, sex pheromone 6665.
- Tipula acuta**,
aggregation, feces pheromones, sympatric populations, *Tipula simplex*, USA,
California 6721.
- Tipula carlinifrons**,
diets, food preferences, larvae, tundra, USSR 6738.
life cycle adaptations, tundra 9111.
- Tipula paludosa**,
molting, developmental stages, pharate condition, pupae 4249.
population dynamics, introduced species, North America 2907.
spiracles, acropyles, respiration, gas exchange 4145.
- Tipula simplex**,
aggregation, feces pheromones, sympatric populations, *Tipula acuta*, *Tipula*
simplex 6721.
- Tipula submontium**,
new species, taxonomy, morphology, Iberia peninsula 9469.
- Tipula ultima**,
morphology, larvae, pupae 6493.
- Tipulidae**,
diets, food preferences, larvae, tundra, USSR 6738.
flight activity, photography, methodology 6468.
zoogeography, check lists, species composition, Iberia peninsula 9469.
- Tissue culture**,
nerves, central nervous system, *Drosophila* 3281.
pathogens, *Drosophila C* virus, protein biosynthesis, *Drosophila melanogaster* 1032.
picornavirus infection, induction inhibition, heat shock proteins, *Drosophila*
melanogaster 982.
- Tissues**,
adenylate cyclase localization, *Locusta migratoria* 930.
adsorption, potato virus Y, tobacco mosaic virus, diets, *Myzus persicae* 3416.
biocumulation, localization, insecticides, diflubenzuron, histochemistry,
Pieris brassicae 1059.
biochemical characteristics, reviews, Ixodidae 8939.
cuticle, differentiation, embryology, *Drosophila melanogaster* 1093.
3',5'-cyclic-AMP phosphodiesterase distribution, *Locusta migratoria* 181.
differentiation, gene regulation, transcription, *Drosophila melanogaster* 1498.
distribution, isocitrate dehydrogenase (NADP⁺), imaginal discs, *Drosophila*
melanogaster 392.
distribution, isoenzymes, glycerol-3-phosphate dehydrogenase (NAD⁺),
Mormoniella vitripennis 6553.
hosts, parasites migration, *Cuterebra fontinella*, *Peromyscus leucopus* 2832.
nervous system, ganglia, N-acetylcholine, *Periplaneta americana* 1282.
- Tithys cambridgei**,
pesticides, morphology, dentition 4942.
- Tithys lamottei**,
new species, taxonomy, morphology, Brazil, Bahia 4769.
- Tithys serrulatus**,
synonymy, taxonomic revision, *Tithys serrulatus* veldardi 4769.
tithystoxin effects on biosynthesis, release, acetylcholine, brain, rats 8180.
- Tithys serrulatus veldardi**,
synonymy, taxonomic revision, *Tithys serrulatus* 4769.
- Tithys stigmurus**,
taxonomic revision 4769.
- Tithys trivittatus fasciolatus**,
ecological distribution, habitat, feeding, Brazil 6838.
- Tithystoxin**,
Tithys serrulatus, effects on biosynthesis, release, acetylcholine, brain, rats
8180.
- Tjederia**,
taxonomy, morphology, Africa 1665.
- Tjederia brevicornis**,
new species, morphology, Africa 1665.
- Tobacco etch virus**,
disease transmission, *Myzus persicae* 7654.
- Tobacco mosaic virus**,
diets, adsorption, helper factor effects on, *Myzus persicae* 3416.
disease transmission, *Myzus persicae* 7654.
- Tobago**,
new species, *Chaetophloeus mandibularis* 806.
- Togo**,
crop fields, chemical control, pest control, *Heliothis armigera*, *Diparopsis*
watersi 2987
surveys, geographical distribution, *Glossina tachinoides* 1326.
- Toketia** ls.,
parasites, new records, geographical distribution, *Vavraia culicis*,
Ascoegregaria, *Aedes polynesiensis* 9196
pest control, biological control, parasites, population establishment,
Romanomermis culicivora, *Aedes polynesiensis* 7630.
- Tolerance**,
asphyxia, colonies, propolis effects on, *Apis mellifica carnica* 1413.
dark, fecundity, *Drosophila simulans*, *Drosophila melanogaster* 8235
host plants alkaloids, ecological distribution, *Drosophila mettleri*, *Lophocereus*
schottii 4389.
magnesium sulfate, ecological distribution effects on, saline environments, *Aedes*
tenuiorhynchus, *Aedes dorsalis* 8101
- m-Tolyl-N-methylcarbamate**,
effects on oxidation, phenylalanine, tyrosine, metabolism, *Bombyx mori* 7317
- Tolypocladium cylindrosoporum**,
pathogens, larvae, *Aedes australis* 4211
- Tomato leaf curl virus**,
disease transmission, insecticides effects on, *Bemisia tabaci* 3705
- Tomato spotted wilt virus**,
vectors, *Scirtothrips dorsalis*, *Frankliniella schultzei* 6909
- Tomato yellow leaf curl virus**,
disease transmission, vectors, *Bemisia tabaci* 7655
- Tomocerus**,
water absorption, coxal vesicles, salinity effects 3365
- Tomocerus minor**,
reproductive strategy, activity, energetics 6843
water balance, water requirements, effects on habitat selection 2604

- Tonga**, biological control, baculovirus infection, *Oryctes rhinoceros* 1822.
new genera, new species, taxonomy, morphology, *Octostigma herbivora* 6388
new species, *Aedes kesseli*, taxonomic revision, *Aedes scutellaris* 6406
- Tongue**, length, functional morphology, foraging behavior, diets, *Syrphidae* 5922.
- Tonnoiriella mirabilis**, new species, taxonomy, morphology, Brazil 1630.
- Tonnoiriella pulchra**, karyotypes, meiosis, males 2329.
- Topical application**, chemosterilization, tepe, hempa, N,N'-hexamethylenbis 8234
insecticides, penetration, metabolism, thioformamides, *Diatraea grandiosella* 4232.
precocene II, effects on attractancy, pest control, *Ceratitis capitata* 8099
toxicity tests, hexachlorocyclobenzene, *Drosophila* 5045
- Topical applications**, 2-acetylpyridine thiosemicarbazones, toxicity, molting inhibition, *Oncopeltus fasciatus* 5786.
insecticides, lindane, effects on carbohydrates, lipids, *Periplaneta americana* 5791.
insecticides, toxicity, comparison, chemical control, *Callosobruchus maculatus* 5781.
- Tortriculicidia kirchocephales**, parasites, new species, *Pitohui kirchocephalus*, New Guinea 3968.
- Tortrothrips koeziarabi**, morphology, developmental stages, abundance, galls, *Quercus emoryi* host plants 4422.
- Tortricidae**, flight activity, diurnal variations, measuring techniques, pheromone traps 472
males, sex pheromone, organic compounds, attractancy 2592.
morphology, sclerites 5653.
periodicity, diurnal variations, flight activity 52.
- Tortricinae**, muscles, genitalia, anatomy, males 8903.
- Tortrix viridana**, pest control, forests, predators, Aves 3037.
- Tortrya hoguella**, new species, taxonomy, morphology, Costa Rica, *Cocos I.* 4888.
- Torulispora**, characterization, intestinal microflora, *Apis mellifera* 2013.
- Torulispora apicola**, experimental infection, mortality, *Apis mellifera* 1808.
- Torymus**, association, galls, *Rudbeckia laciniata*, *Asphondylia helianthiglobulus* 6020.
interspecific relationships, galls, *Asphondylia helianthiglobulus*, USA.
Pennsylvania 5182.
parasitoids, pests, biological control, *Dryocosmus kuriphilus*, Japan 4545.
- Torymus advenus**, association, galls, *Rudbeckia laciniata*, *Asphondylia helianthiglobulus* 6020.
interspecific relationships, galls, *Asphondylia helianthiglobulus*, USA.
Pennsylvania 5182.
- Torymus capite**, parasitoids, oviposition inhibition, symbiosis, *Sclerotium asteris*, *Asteromyia carbonifera* 8309.
- Toxaphene**, toxicity, *Insecta* 1830.
- Toxares detiger**, abundance, host-parasite interactions, *Metopopolophum dirhodum*, *Sitobion avenae* 1278.
- Toxic shock syndrome**, man, association, stings, *Hymenoptera*, *Staphylococcus aureus* 8416
- Toxicants**, cattle pest control, efficacy, *Musca autumnalis*, *Musca domestica* 2176
chemical control, efficacy, *Solenopsis invicta* 2192
effects on queens, colonies social behavior, *Solenopsis invicta* 1942
El 468, El Lilly, bait, pest control, *Solenopsis invicta* 3437
growth regulators, alstoid, diurnal, effects on development, *Culex pipiens* 1042.
host plants, oviposition mistakes, larvae development, *Papilio glaucus*, *Angelica atropurpurea* 8247.
- Toxicity**, acetate, methamidophos, larvae, *Insecta* 315
adjuvants effects on, nuclear polyhedrosis virus, *Heliothis zea* 3450
alfatoxin, effects on mortality, development, body length, *Drosophila melanogaster* 5803
antibiotics, milbemycin, *Tetranychus urticae* 1838
bait, boric acid, iodofenphos gel, *Blattella germanica* 5776
bait, chemical control, *Aceromyrmex octospinosus* 2981
bait, chemical control, *Formicidae* 2991
benzyl chrysanthemates, neurophysiology, physicochemical properties, *Periplaneta americana* 5796
benzyl chrysanthemates, neurophysiology, symptoms, *Periplaneta americana* 5795
bioassays, cells, culture, 8-endotoxin, *Bacillus thuringiensis*, *Choristoneura fumiferana* 879
bioassays, spores, crystals, *Bacillus thuringiensis*, *Ostrinia nubilalis* 5780
bicides, alkyl phenyl (dichloromethyl) phosphonates, *Culex fatigans*, *Drosophila melanogaster* 1053
biological control, *Bacillus sphaericus*, *Culex quinquefasciatus* 6603
biological control, *Bacillus thuringiensis*, *Bacillus cereus*, *Manduca sexta*, *Aedes aegypti* 4186
biological control, larvae, *Bacillus sphaericus*, *Culex pipiens quinquefasciatus* 6640
Buthos judicus venom, *Sarcophaga falcata*, *Locusta migratoria* 5054
Capicium frutescens extracts, *Sitophilus oryzae* 1065
carbon dioxide, fumigation, *Anastrepha suspensa* 1845
chemical control, carbofuran, *Atherigona soccata* 3003
chemical control, methyl parathion, *Heliothis virescens* 4635
chemosterilants, comparison, 15 compounds, *Sitotroga cerealella* 7399
chloridform, nontarget organisms, *Geocoris*, *Hippodamia convergens*, *Nabis*, *Chrysopa carnea* 4227
cytochrome, effects on RNA biosynthesis, *Anopheles albimanus* 6273
DDT, lindane, stored products pests, *Insecta* 7409
DDT powders, *Spodoptera litura* 7421
deltamethrin, *Glossina morsitans* 314
3-deoxy-3-fluoro-D-glucose, metabolism, effects on glycolysis, *Locusta migratoria* 6619.
- Toxicity, (continued)**
dieldrin, metabolites, *Blaberus discoidalis* 301
diflubenzuron, insecticides, nontarget organisms, colonies, *Apis mellifera* 3446.
diflubenzuron, metabolism, *Aedes aegypti* 302.
diflubenzuron, nymphs, *Melanoplus sanguinipes* 6628
diflubenzuron, *Oxya japonica* 5767
diflubenzuron, penfluron, chitin biosynthesis, *Chorotogon trachypterus* 6620
diflubenzuron, streams, *Insecta* 7024
effects on, skeletal muscles, exotoxins, *Centruroides suffusus suffusus* 5055
8-endotoxin, *Bacillus thuringiensis*, *Peris rapae*, *Lymantria dispar*, *Ephestia cautella* 7381
endotoxins, *Bacillus thuringiensis*, *Insecta* 7365
envenomation, man, conferences 8706
evaluation, pesticides, pirimicarb, ethionfenacarb, fenitrothion, *Apis mellifera* 8171
exotoxins, *Bacillus thuringiensis*, *Agrotis ipsilon*, *Spodoptera frugiperda*, *Ostrinia nubilalis* 5051
fatty acids, lipid metabolism, lipolysis, *Reticulitermes flavipes* 6568.
fenitrothion, eggs, *Rhodnius prolixus* 9022
fungams, chemical control, *Acan 1045*
fungams, productivity, comparative studies, *Sitophilus oryzae*, *Tribolium castaneum* 1074
growth regulators, *Aedes aegypti*, *Rhodnius prolixus* 9054
growth regulators, diflubenzuron, *Spodoptera maurita* 3034
growth regulators, MV678, brackishwater environment, *Aedes sollicitans*, *Culex salinarius* 6618
herbicides, dinoseb-acetate, effects on developmental stages, *Culex pipiens* 682
herbicides, malathion, larvae, *Culex pipiens* 1038
herbicides, nontarget organisms, *Apis mellifera* 5044
herbicides, pest control, *Carabidae* 9021
honey, case reports, *Rhododendron pollen*, *Apis mellifera*, Nepal 5321
hydrogen peroxide, larvae, *Aedes aegypti* 303
insecticides, aerosols, drift, *Glossina morsitans*, Botswana 1469
insecticides, analogues, *Musca domestica* vicina, *Culex pipiens pallens* 4230
insecticides, *Apanteles omphus*, *Phylloscopus bicoloratus* 2655
insecticides, *Anastrepha fasciculata* 8204
insecticides, bacteria infection effects on, *Anthonomus grandis grandis* 8188
insecticides, bendiocarb, pirimiphosmethyl, *Culex quinquefasciatus*, *Anopheles stephensi* 3442
insecticides, ¹⁴C-phorate, *Myzus persicae*, *Brevicoryne brassicae* 2658
insecticides, carbaryl, age effects, *Leucophaea maderae* 1846
insecticides, carbaryl, pest control, nymphs, *Nalpanata lugens* 1847
insecticides, carben, nontarget organisms, *Chrysopa carnea*, *Hippodamia convergens*, *Aphidius melinus* 5785
insecticides, *Coccinella septempunctata*, *Brevicoryne brassicae* 7401
insecticides, comparison, efficacy, *Hypera postica* 6624
insecticides, demeton, endosulfan, methomyl, oxamyl, azinphosmethyl, carbaryl, *Phylloscopus bicoloratus*, *Apanteles omphus* 8300
insecticides, *Diatraea virgata virgata*, *Diatraea undecimpunctata howardi* 8184
insecticides, diapause effects on, *Diatraea grandiosella* 4234
insecticides, diflubenzuron, factors affecting, *Laspeyresia pomonella* 4225
insecticides, diflubenzuron, *Hypera postica* 7420
insecticides, effects on, esterase polymorphism, *Choristoneura occidentalis* 8202
insecticides, efficacy, *Bissus leucopertus leucopertus* 9024
insecticides, efficacy, mephosphol, *Chilo partellus* 3031
insecticides, eggs, larvae, adults, *Spodoptera littoralis* 6615
insecticides, *Insecta* 1067
insecticides, larvae, *Simulium autumnum*, *Simulium equinum* 5053
insecticides, lindane, carbaryl, chlorpyrifos, *Dendroctonus brevicornis*, *Enoclerus lecontei*, *Tenebrio chlorodora* 4228
insecticides, lindane, DDT, irradiation, *Tribolium castaneum* 7418
insecticides, malathion, pirimiphos, difluron, *Sitophilus granarius* 5769
insecticides, methidathion, citrus spray oil, *Aomediella auranti* 5048
insecticides, methyl parathion, azinphosmethyl, malathion, permethrin, fenvalerate, *Anthonomus grandis grandis* 9026
insecticides, mortality, pest control, *Pentalonia nigronervosa* 1843
insecticides, pests, *Myzus persicae*, *Coleomegilla maculata* lengi, *Chrysopa oculata* 318
insecticides, nontarget organisms, *Heliothis predators* 8172
insecticides, nontarget organisms, *Megachile rotundata* 4224
insecticides, nontarget organisms, *Trichogramma perkinsi*, *Trichogramma australicum* 5050
insecticides, *Ostrinia nubilalis* 6626
insecticides, parasites, *Copidosoma koehleri* 7411
insecticides, pest control, *Aphis craccivora* 7417
insecticides, pest control, *Heliothis consanguinea* 7415
insecticides, pest control, *Oreocla oryzae*, China, People's Rep. 1013
insecticides, pest control, *Phorodon humuli*, *Aphis fabae* 9028
insecticides, pest control, *Sitophilus granarius* 9297
insecticides, pest control, *Typhlocyba incertalis* 1848
insecticides, pests, *Laphygma crymum*, *Aphis craccivora* 7410
insecticides, phorate, metabolites, *Aphis fabae* 5777
insecticides, pyrethroids, natural enemies, pests, reviews, *Insecta* 7408
insecticides, sesame, dieldrin, ganglia, electrophysiological recording, *Blaberus discoidalis* 5778
insecticides, soil moisture effects on, chemical control, *Lachnostena consanguinea* 5337
insecticides, structure-activity relationships, *Musca domestica*, *Phaedon coelestis* 2661
insecticides, susceptibility, *Hypothenemus hampei* 8199
insecticides, synergism, *Ostrinia nubilalis* 3440
insecticides, synergism, pesticide resistance, *Labops* 1841
insecticides, synergism, *Tribolium castaneum* 7405
insecticides, thioformamidine, *Diatraea grandiosella* 9030
insecticides, topical applications, comparison, chemical control, *Callosobruchus maculatus* 5781
insecticides, *Trichogramma perkinsi*, *Trichogramma australicum* 3020
isodilipalloyl alcohol, synergism, carbamate insecticides, *Tribolium castaneum* 7416
larvae fungal flora, temperature effects, *Fusarium*, *Tenebrio molitor* 996
larvicide, polycystenes, *Aedes aegypti* 317
larvicide, *Simulium* 9016
leaves, *Persea americana*, *Spodoptera littoralis* 7787
lindane, DDT, pesticides (organochlorine), *Musca domestica* 7414
lindane isomers, *Drosophila* 5040
Lycopersicon esculentum foliage, phenol, *Heliothis zea* 5793.

Toxicity, (continued)

- methidathion, parasitoids, *Aonidiella auranti* 9020.
methothrexate, *Bracon hebetor* 8198.
methothrexate, effects on protein biosynthesis, egg production, *Bracon hebetor* 8203.
methyl bromide, phosphine, fumigation, *Tribolium castaneum* 6627.
methyl bromide, phosphine, 7 species, *Coleoptera* 1073.
methyl parathion, toxaphene, *Insecta* 1830.
milybemycin, Tetranychus urticae, Panonychus citri 2662.
moulting inhibitors, *Choristoneura occidentalis* 9031.
monocrotophos, insecticides, pesticide residues, *Fusca fulgura*, pest control, 2653.
Amsacta biguttula biguttula 2653.
mortality, insecticides, monocrotophos, chemical control, *Amsacta moorei* 1844.
mycetoxins, parasitism, *Entomophaga egressa*, *Choristoneura fumiferana* 5798.
mycetoxins, viability, development, body length, *Drosophila melanogaster* 4212.
Naja mosambica mosambica venom, enzymatic activity effects on, *Arthropoda* 1057.
nicotine, aquatic organisms, *Insecta* 9371.
N-nitrosodimethylamine, pesticide resistance genes, *Drosophila melanogaster* 7048.
nontarget organisms, *Bacillus thuringiensis* kurstaki, *Apanteles glomeratus*, *Pimpla tunonellae* 7379.
nuclear polyhedrosis virus, *Mamestra brassicae*, Europe 2617.
oxygen depletion, freshwater environment, indicator species, larvae.
Ephestiophora 3852.
pathogenicity, *Bacillus thuringiensis*, *Culicidae* 6599.
pathogenicity, nuclear polyhedrosis virus, *Agrotis ipsilon* 3402.
pathogens, pest control, *Microsporida*, *Aedes aegypti* 8127.
pest control, altoids, juvenile hormones analogs, *Culicidae* 7739.
pest control, *Bacillus thuringiensis*, *Culicidae* 9012.
pest control, *Bacillus thuringiensis thuringiensis*, *Bacillus thuringiensis* kurstaki, *Achea janata* 7384.
pest control, bacteria, *Simulidae* 9013.
pest control, biological control, *Epilachna varivestis*, *Bacillus thuringiensis* 8448.
pest control, formulations, *Bacillus thuringiensis*, *Anopheles arabiensis* 8121.
pesticide applications, crop fields, *Apis mellifera*, *Zea mays* 6202.
pesticide residues, insecticides, pollution effects, *Corophidius monticola* 296.
pesticide residues, insecticides, systemic, *Aphis gossypii* 7413.
pesticide residues, mephosfolan, soil, *Zea mays* 7709.
pesticide residues, nontarget organisms, natural enemies, *Planococcus citri* 5800.
pesticide residues, soil, effects on nontarget organisms, *Musca domestica* 2656.
pesticides, chemical control, *Aedes aegypti*, *Culex pipiens* 1832.
pesticides, chemical control, fluorolipids, *Reti culertermes flavipes* 1054.
pesticides, chemical control, government regulation, USA 7812.
pesticides, chemical control, *Helopeltis antoni*, Sri Lanka 577.
pesticides, *Coleophora laricella* 5782.
pesticides, effects on enzymatic activity, acetylcholinesterase, correlation analysis, *Aphis citricola* 1064.
pesticides, nontarget organisms, *Aphidoletes aphidimyza* 8173.
pesticides (organophosphorus), bioaccumulation, larvae, *Bombus mori* 2663.
pesticides (organophosphorus), *Culex pipiens* 9027.
pesticides (organophosphorus), stored products pests, *Coleoptera* 7403.
pesticides, phenobarbital, enzymes, glutathione transferase, induction, *Musca domestica* 5783.
pesticides, profenofos, *Culicidae*, *Musca domestica*, *Trichoplusia ni* 5775.
pesticides, synergism, *Spodoptera littoralis* 7400.
pests, metals, ponds, *Orthocladus consobrinus*, *Limnephilus pallens*, *Chironomus riparius*, Canada, Northwest Territories 6696.
pharmacokinetics, insecticides, *Phaedon cochleariae* 1019.
phenol, Lycopersicon esculentum foliage, *Heliothis zea* 5793.
phosphine, methyl bromide, *Drosophila melanogaster* 5031.
phosphine, stored products pests, *Insecta* 1050.
phosphine, stored products pests, *Insecta* 1051.
piribedil, nerve transmission, *Periplaneta americana* 3280.
plant extracts, insecticides, *Bagrada cruciferarum*, *Centratherum anthelminticum*, *Cyperus rotundus*, *Strychnos nux-vomica* 6625.
plant extracts, neem oil, larvae, *Azadirachta indica*, *Culex fatigans* 7396.
pollution effects, alum, *Tanytarsus dissimilis* 4218.
polycyathenes, photosensitization effects on, *Aedes aegypti*, *Simulium vitatum* 895.
precoene I, precoene II, larvae, *Locusta migratoria* 1049.
quacinoins, larvae, *Locusta migratoria migratorius* 2660.
rose bengal, erythrosin B, chemical control, *Musca autumnalis* 2233.
spores, spore crystals, *Bacillus thuringiensis*, *Ostrinia nubilalis* 5052.
temperature effects on, insecticides, permethrin, fenvalerate, deltamethrin, *Trichoplusia ni*, *Spodoptera frugiperda*, *Heliothis virescens* 8206.
threshold limits, insecticides, cypermethrin, *Heliothis armiger*, *Diparopsis castanea*, *Earias* 5389.
topical applications, 2-acetylpyridine thiosemicarbazones, molting inhibition, *Oncopeltus fasciatus* 5786.
trichlorfon, juvenile hormones analogs, *Blattella germanica* 1829.
venom, *Apis mellifera* 5041.
venom, bioassays, *Atrax* 1052.
venom, biochemical analysis 4215.
venom, *Euproctis chrysorrhoea*, *Euproctis subflava* 8185.
venom, *Heterometrus scaber* 2182.
venom, neurons, mechanoreceptors, neuromuscular junctions, *Crustacea*, *Latrodectus mactans* 9017.
venom, rats, *Leirus quaquetrarius* 8193.
venom, sensitivity, man, reviews, *Apidea* 6616.
weeds, herbivores, *Conium maculatum*, USA, California 8353.
xanthane dye, *Musca domestica* 7888.

Toxicity testing,

- avermectins, Streptomyces, *Insecta*, Acari 4214.
insecticides, pest control, *Diabrotica undecimpunctata undecimpunctata* 8189.
insecticides, soil bioassays, larvae, *Diabrotica undecimpunctata* 4220.
insecticides, statistical analysis, body weight effects on lethal dose, *Choristoneura occidentalis* 8207.
methodology, pest control, *Bacillus thuringiensis israelensis*, *Culex pipiens* 8119.
methodology, pollution effects, sediments, deposit feeders, bioaccumulation, food chains 4314.
pollution effects, diflubenzuron, streams, community composition, *Insecta* 9370.

Toxicity tests,

- dimilin, larvae, *Apis* 7406.
ecosystem dynamics, indicator species, soil fauna, *Collembola*, *Coleoptera*, *Diptera* 5761.

Toxicity tests, (continued)

- hexachlorocyclohexane, topical application, *Drosophila* 5045.
insecticides, methodology, molting, *Heliothis virescens*, *Heliothis zea* 3429.
insecticides, mutants, *Tribolium castaneum* 7397.
insecticides, susceptibility, pests, *Locustana pardalina* 5039.
mortality, instars, *Culex pipiens*, *Culex salinarius*, *Bacillus sphaericus* 1842.
pesticides, effects on nontarget organisms, predators, *Amblyseius fallacis*, *Amblyseius hibens* 2664.
pesticides, methodology, *Amblyseius fallacis*, *Tetranychus urticae* 7387.
pesticides, orchards pest control, *Amblyseius hibens* 2664.
rhodamine 6G, rhodamine B, xanthene dyes, *Musca domestica* 3433.
soil pollution, indicator species, *Collembola* 5047.

Toxicology,

- bioaccumulation, growth regulators, methoprene, cattle, *Haematobia irritans* 4520.
insecticides, benzophenyl urea, inhibition, emergence, eggs, *Tribolium castaneum*, biological control 3451.
insecticides, mode of action, reviews, *Insecta* 5802.
pesticide resistance, chemical control, pests, *Insecta* 3817.
plant extracts, metamorphosis, larvae, *Epilachna varivestis*, *Azadirachta indica* 3435.
stings, effects on man, scorpions, Switzerland 658.
susceptibility, insecticides, host plants, *Spodoptera frugiperda* 3010.

Toximal MP-8,

- mutagenicity testing, spermatozoa, *Drosophila melanogaster* 300.

Toxins,

- Bacillus thuringiensis*, toxicity *Trichoplusia ni*, *Aedes taeniorhynchus* 5765.
chemical analysis, mass spectroscopy, *Paravespula vulgaris* 248.
Chlorella ellipsoidea, effects on larvae mortality, biological control, *Culex quinquefasciatus* 1353.
defence secretions, *Prothionotermes simplex*, *Schedorhinotermes lamanianus*, biochemical analysis 3383.
diets, hosts, parasitoids, *Hypoosoter exiguae*, *Heliothis zea* 3578.
effects on giant axons, *Periplaneta americana*, *Androctonus australis* 5801.
eggs, biochemical analysis, *Amblyomma hebraeum* 1070.
environmental effects, aquatic environment, development, survival, *Chlorella ellipsoidea*, *Culicidae* 6691.
immune response, man, reviews, *Arthropoda* 5764.
medical importance, *Chilopoda*, *Diplopoda*, *Diplodora* 641.
paralysis, infestation, *Argas persicus*, *Argas africanus* 1352.
purification, biological control, *Anopheles*, *Bacillus sphaericus* 8187.
purification, characterization, conferences 8706.
salivary gland, morphology, *Ixodes holocyclus* 1800.
venom, biochemical analysis, *Heterometrus scaber* 4179.
venom, biochemistry, reviews, *Insecta* 5804.
venom, *Buthus judaicus*, effects on action potential, sodium currents, axons, *Periplaneta* 8182.
venom proteinase activity, effects on skin, man, *Euproctis subflava*, *Euproctis chrysorrhoea* 8178.
venom, toxicity, *Buthus judaicus*, *Sarcophaga falcata*, *Locusta migratoria* 5054.

Toxomer marginatus,

- food organisms, predation, *Misumena* 457.
foraging behavior, interspecific relationships, flowers, *Bombus* 2115.

Toxopeusella,

- new species, taxonomy, morphology 5584.

Toxoptera citricidus,

- pests, temperature, effects on population growth 7619.

Toxorhynchites splendens,

- dengue virus detection, immunofluorescence, experimental infection 8167.

Toxorhynchites,

- bibliographies 6338.
predators, biological control, vectors, disease transmission 2861.

Toxorhynchites amboinensis,

- cell lines, virulence, dengue virus 7388.
oviposition, fecundity, habitat, USA, Indiana 5857.
reproductive behavior, fecundity, comparative studies, *Toxorhynchites splendens* 439.

Toxorhynchites brevipalpis,

- maxillary palps, sensilla, anatomy, ultrastructure 4137.
predation, effects on population density, *Aedes aegypti* 7568.
sensilla, anatomy, morphology, reviews 8921.

Toxorhynchites changbaiensis,

- new species, morphology, China, People's Rep. 25.

Toxorhynchites leicosteri,

- electrophoresis, glucosephosphate isomerase 5683.

Toxorhynchites metallicus,

- electrophoresis, glucosephosphate isomerase 5683.

Toxorhynchites rutilis,

- fate, blood meals, sugar, digestive tract, effects on starvation 922.

Toxorhynchites rutilis rutilis,

- predators, biological control, *Aedes aegypti*, *Culex quinquefasciatus* 4579.

Toxorhynchites splendens,

- electrophoresis, glucosephosphate isomerase 5683.
life history, predation, oviposition, fecundity 1188.
oviposition, diurnal variations 3525.
reproductive behavior, fecundity, comparative studies, *Toxorhynchites amboinensis* 439.
use, bioassays, dengue virus 1820.

Toxorhynchites theobaldi,

- food preferences, feeding behavior, *Aedes aegypti*, *Culex fatigans* 494.

Toxotrypana curcucauda,

- incidence, parasitoids, Costa Rica 2818.

Trachea,

- gas exchange, respiration, *Hyalophora cecropia* 5671.
morphology, respiration, *Periplaneta americana* 4987.

Tracheae,

- antenna, development, larvae, *Tenebrio molitor* 9043.

Trachusa byssina,

- biochemical analysis, Dufour's gland, secretion, volatiles, cells 244.

Trachymyrmex kenaphi,

- new species, taxonomy, morphology, Paraguay, Chaco Basin 5595.

Trachypachidae,

- phylogeny, taxonomy, systematics 4785.

Trachyspermum ammi,

- oils, effects on metamorphosis, mortality, *Aedes aegypti* 6623.

Trachysphaera rotundata,

- new records, Iran 851.

- Tracking,**
antennae, visual perception, *Gryllus campestris* 2534.
courtship, females, *Drosophila melanogaster* 1140.
orientation, visual perception, mathematics, *Musca domestica*, 412.
visual perception, mating behavior, *Drosophila melanogaster* 908.
visual perception, oscillations, *Musca domestica* 912.
- Trail following behavior,**
chemical communication, recruitment, food sources, *Tetramorium impurum* 3840.
diel periodicity, temperature effects, *Indomyrmex purpureus*, Australia 3546.
sex pheromone, scent marking behavior, *Pseudococcus calceolariae* 1932.
trail pheromone, *Polybia sericea* 4308.
- Trail pheromone,**
biochemical analysis, *Myrmica rubra* 973.
characterization, purification, *Odontotermes obsesus* 8972.
chemical communication, chemical composition, reviews, *Trigona spinipes* 5009.
chemical communication, role, sternal gland, *Anaeretus simoni* 2758.
chemical communication, sternal gland, morphology, *Onychomyrmex* 8977.
glands, morphology, *Camponotus ephippium* 8978.
identification, *Dufour's gland*, *Solenopsis invicta* 2597.
predatory behavior, *Amblyseius fallacis*, *Phytoseiulus macropilis* 2156.
scent marking behavior, trail following behavior, *Pseudococcus calceolariae* 1932.
secretion, sternal gland, *Tnervitermes bettonianus* 3374.
trail following behavior, *Polybia sericea* 4308.
venom gland, 3-ethyl-2,5-dimethylpyrazine, *Myrmica rubra* 6576.
workers recruitment, feeding behavior, *Myrmica rugulosa* 4378.
- Tramea minuta,**
new species, taxonomy, morphology, Venezuela 8000.
- Tramea rustica,**
new species, taxonomy, morphology, Venezuela 8000.
- Tranetes ilicino-gilva,**
Syndesmus cornutus, infestation, pests, wood 9271.
- Trans-aldrindiol,**
dieldrin metabolites, acute toxicity, *Blaberus discoidalis* 301.
- (+)-Trans-verbenyl acetate,**
attractancy, sex pheromone mimics, *Periplaneta americana* 4311.
- Trans-9-oxo-dec-2-enoic acid,**
secretions, pheromones, queens, *Apis mellifera* 225.
- Transcription,**
activation, heat shock genes, *Drosophila* 1506.
cell-free system, tRNA Val genes cDNA, *Drosophila melanogaster* 9389.
X chromosome, aneuploidy, *Drosophila melanogaster* 2301.
DNA, enzymes, histone acetyltransferase, *Drosophila melanogaster* 5680.
DNA, RNA polymerase, genes, *Drosophila* 1507.
cDNA, rRNA genes, cell-free system, *Drosophila melanogaster* 8624.
gene regulation, differentiation, tissues, *Drosophila melanogaster* 1498.
genes, *Drosophila* 3061.
genes, yolk proteins, *Drosophila melanogaster* 4662.
RNA biosynthesis, salivary gland, *Chironomus thummi* 5019.
RNA, DNA nomads, *Drosophila melanogaster* 5681.
rRNA Arg genes, initiation sites characterization, *Drosophila* 9390.
temperature effects on, heat shock genes, *Drosophila melanogaster*, *Drosophila simulans* 7834.
 α -tubulin, genes, *Drosophila melanogaster* 6242.
vitellogenin genes, juvenile hormones stimulation, fat body, *Locusta migratoria* 6569.
- Transdetermination,**
marginal discs, *Drosophila* 338.
- Transduction,**
sensory stimuli, mechanoreceptors, *Periplaneta americana* 2536.
- Transfer,**
mechanoreceptors, lymphom slit sense organs, electrophysiological recording, *Cupienius salei* 4129.
- Transformation,**
seminal fluid receptacles ultrastructure, molting, *Thermobia domestica* 1076.
- Translation,**
errors, protein biosynthesis, developmental stages, *Drosophila melanogaster* 1536.
mRNA, chorion proteins, Bombyx mori, microinjection, oocytes *Xenopus laevis*, cDNA *Xenopus laevis* analysis 8083.
mRNA, heat shock, protein biosynthesis, *Drosophila melanogaster* 5708.
mRNA, protein biosynthesis, embryos, *Manduca sexta* 3887.
- Translocation,**
genetic control, pest control, *Culex quinquefasciatus* 6287.
proteins, heat shock, Kc cells, *Drosophila* 7838.
- Translocations,**
Y chromosome, embryo lethality, genetic control, *Hylemyia antiqua* 2316.
Y chromosome, fertility, *Drosophila melanogaster* 3089.
Y chromosome, genetic control failure, *Lucilia cuprina* 2348.
fitness, homozygotes, genetic factors, *Hylemyia antiqua* 2330.
genetics, fertility, mating types, heterozygotes, pest control, *Musca domestica* 2128.
sex chromosomes, population genetics, *Kaloterpes approximatus* 3892.
sex linkage, *Isotermes schwarzi* 3077.
spermatotax, neurons, X radiation effects on, *Drosophila melanogaster* 2331.
- Transmission,**
arboviruses, activity patterns, Culicidae, Brazil 4498.
arboviruses, *Culex annulirostris*, Australia 3698.
Y chromosome, entire compound second chromosome, genetic analysis, *Drosophila melanogaster* 9401.
chromosomes, population genetics, *Drosophila melanogaster*, USA, Texas 3126.
crop fields, *Erwinia carotovora*, *Drosophila melanogaster* 3424.
X disease, infectivity, *Macrostes fasciatus* 4191.
ectoparasites, domestic animals, *Psoroptes ovis*, *Ovis canadensis* 651.
equine infectious anemia virus, *Aedes sollicitans*, *Psorophora columbiana* 1329.
fungi, infection, monoterpenes accumulation, *Scolytus ventralis*, *Abies grandis* 8473.
geographical distribution, Bacillariophyceae, *Insecta* 564.
infection, *Tuzetia debauesii*, *Simulium vittatum* 3405.
Ixodes texanus, *Babesia lotioni*, *Procyon lotor*, *Ixodes texanus*, USA, Connecticut 1004.
maize dwarf mosaic virus, vectors, Aphididae 3806.
malaria, susceptibility, Culicidae, USA, Florida 1320.
malaria, vectors, chemical control, *Aopheles darlingi*, French Guyana 636.
mechanical stimuli, vibrations, webs, Araneae 3913.
- Transmission, (continued)**
Molluscs, role, *Neolautus fenestratus*, *Carthamus tinctorius* infection 5346.
nuclear polyhedrosis virus, *Oecchia schellenbergi* predation, *Heliothis punctiger* larvae 1029.
nuclear polyhedrosis virus, *Orygia pseudotsugata*, USA, California 280.
nuclear polyhedrosis virus, pest control, *Trichoplusia ni*, *Podisus maculiventris* 3811.
parasites, *Onchocerca tarsicola*, Diptera 662.
parasites, vectors, *Mansonella ozzardi*, *Culexoides vanipennis* 3399.
pathogens, *Babesia microti*, *Ixodes dammini* 635.
potato virus Y, temperature effects on, *Myzus persicae*, *Macrosiphum euphorbiae* 7699.
Solanum nodiflorum mottle virus, coleoptera 278.
spotted fever, *Rickettsia tsutsugamushi* infection, guinea-pigs, *Ornithodoros moubata* 9231.
strawberry mild yellow edge virus, strawberry crinkle virus, *Chaetosiphon fragaefolii* 274.
sweet potato leafy mottle virus, *Aphis gossypii*, *Ipomoea setosa*, *Ipomoea nil* 3819.
Theileria mutans, *Amblyomma hebraeum*, South Africa 665.
Trypanosoma, *Glossina* 2915.
Trypanosoma, role, *Glossina morsitans morsitans*, sterile-release 5277.
Trypanosoma vivax, vectors, *Glossina morsitans morsitans*, *Glossina morsitans centralis* 3681.
virus-like particles, feeding, *Glossina pallidipes* 8140.
viruses, Aphididae 4195.
viruses, *Rhopalosiphum padi* 2178.
- Transmission (sexual),**
diversity - chromosomes, genomes elimination, *Drosophila melanogaster* 3064.
symbiosis, *mesomysomantis*, *Rhizopertha dominica* 7536.
- Transmission (transovarial),**
Calaima encephalitis virus, temperature effects on, *Aedes dorsalis*, *Aedes melanopus* 9236.
pathogens, pest control, *Vainmorpha necatrix*, *Nosema pyrausta*, *Lepidoptera* 8125.
St. Louis encephalitis, *Culex pipiens* 634.
- Transmission (vertical),**
pathogens, infectivity, *Microsporida*, *Aedes aegypti* 8127.
- Transpiration,**
population-environment relations, pests, *Fragaria vesca*, *Tetranychidae* urticae 2060.
water balance, effects on habitat selection, *Orchesella cincta*, *Tomocerus minor* 2604.
- Transplantation,**
imaginal discs, malpighian tubules development, *Galleria mellonella* 6632.
pacemakers, circadian rhythms, locomotor activity, *Acetia domestica* 6527.
- Transplants,**
leg, atoms, chemoreception, *Sarcophaga bullata* 2535.
- Transports,**
cytoplasm, ovary, ultrastructure, *Cocciella*, *Tenebrio* 1077.
fluids, salivary gland ducts, *Aedes aegypti* 7362.
hydrocarbons, hemolymph, cuticle, *Periplaneta americana* 7307.
ions, cell membranes, enzymatic activity, porosome particles, *Manduca sexta* 3324.
metodology, parasites, *Romanomonis culicivora*, *Culicidae* 4078.
potassium, mudgut, larvae, reviews, *Lepidoptera* 8081.
shipment, containers, design, *Insecta* 1689.
- Transposition,**
genes, *Drosophila melanogaster* 1504.
- Transposons,**
DNA nucleotide sequence, *Drosophila* 4669.
DNA nucleotide sequence, *Drosophila melanogaster* 1502.
transposon mdg3, repeated sequence, DNA nucleotide sequence, *Drosophila melanogaster* 9382.
transposon 412, repeated sequence, DNA nucleotide sequence, *Drosophila melanogaster* 9381.
- Trapping,**
abundance, seasonal variations, *Dacus opulæ*, *Dacus tenuifascia*, Australia 3636.
age, indicators, damage, *Ostrinia nubilalis*, *Capusium annuum* 8514.
attractants, crop fields, *Dela radicum* 3752.
attractants, *Protophaga obscura* 6144.
attractants, sex pheromone, *Popillia japonica* 4632.
baits, attractancy, *Hylemyia antiqua*, *Hylemyia platura* 3580.
baits efficacy, *Blattella germanica* 9335.
catching methods, *Glossina morsitans submorsitans*, *Glossina tachinoides*, Nigeria 5610.
control programs, disease transmission, trypanosomiasis, *Glossina*, Congo, People's Rep. 9244.
efficiency, food sources effects on, *Blattella germanica* 3248.
eggs, females, predations, population levels, *Dela coraciata* 1290.
grain, efficacy, pests, *Anthonomus grandis* 8528.
light traps, environmental factors, catchability, *Heliothis armiger*, *Heliothis punctiger*, Australia, New South Wales 1472.
methodology, *Agrotis segetum*, *Agrotis ipsilon*, Zimbabwe 9179.
methodology, *Carabidae* 8859.
methodology, efficacy, *Culicidae* 8860.
methodology, *Euphistotypteryx ochracea* 4924.
methodology, *Glossina* 4074.
pests, attractants, synthetic sex pheromone, *Homona magnanima*, Japan 5336.
pheromone traps, seasonal variations, *Spodoptera litura*, Japan 2229.
population density, estimation, *Musca vetustissima*, Australia 1311.
sex lures, *Carposina niponensis*, *Grapholita molesta*, *Synanthedon Hector*, *Archippus brevicauda*, Japan 5334.
synthetic pheromones response, *Trypodendron* 701.
- Traps,**
abundance, activity patterns, *Labidura riparia* 2163.
abundance, sex ratio, *Auchenorrhyncha*, Egypt 6950.
adhesives, efficacy, *Insecta* 50.
aromatic compounds, attractancy, pest control, *Macroctylus subspinosus* 8487.
attractancy, weather effects on, *Hydrotaea irritans* 2983.
attractants, efficacy, *Glossina morsitans morsitans*, *Glossina pallidipes*, Zimbabwe 3670.
attractants, species composition sampling, *Neuroptera* 1686.
attractants, volatiles, *Allium cepa*, *Hylemyia antiqua* 421.
bait, larvae, *Clemencia destructor*, *Hypolithus bicolor* 56.
carrion baiting, demography, *Anthropoda* 1694.
catches, oviposition, *Parasetigena silvestris*, *Tachinomyia*, Oswaldi, *Patelloa*

Traps, (continued)

- silvatica, *Gonia sagax* 55.
 catching methods, aquatic animals, crop fields, *Insecta* 5624
 catching methods, emergence, larvae, *Insecta* 6457
 catching methods, pheromone traps, *Agrotis ipsilon* 2244
 catching methods, pheromones, attractants, design, *Anthonomus grandis* 702
 catching methods, pheromones, Scolytidae 64
 catching methods, *Tabanus lineola*, *Tabanus nigrovittatus*, USA, Massachusetts, Cape Cod 732
 counters, acoustics, design, sex pheromone, *Insecta* 54
 diurnal variations, periodicity, flight activity, Tortricidae 52
 efficacy, attractants, *Delia brassicae* 6188
 efficacy, *Blattella germanica* 5352
 efficacy, *Dermatocor andersoni* 5622
 efficacy, *Glossina moritans moritans*, *Glossina pallidipes*, Zimbabwe 3669
 efficacy, pest control, *Glossina fuscipes quanzensis*, Congo, People's Rep. 9262
 efficacy, Pius association, *Insecta* 8021
 efficacy, visual stimuli, pest control, *Liriomyza sativae*, *Liriomyza trifolii* 2195
 efficiency, comparative studies, *Glossina pallidipes* 48
 efficiency, diets, *Anthonomus grandis grandis* 6194
 eggs, oviposition, methodology, *Phthorimaea operculella* 857
 emergence, catching methods, aquatic environment, Chironomidae 6471
 flight activity, abundance, diurnal variations, Culicidae 7617
 flight activity, phenology, *Rhopalosiphum padi*, *Sitobion avenae*, *Metopolophium dirhodum* 6826
 flight, design, *Insecta* 1687
 flight, Hymenoptera 2484
 insecticides, decamethrin, pest control, *Glossina fuscipes quanzensis*, *Glossina palpalis palpalis*, Congo, People's Rep. 5457
 methodology, efficiency, Phlebotomidae 47
 modification, attraction, *Glossinidae* 4074
 mortality, *Apocrita* 5615
 oviposition, attractants, *Amyelois transtella* 6170
 oviposition, eggs, enumeration, substrate specificity, methodology, *Aedes aegyptus* 860
 pest control, efficacy, *Anastrepha ludens* 4628
 pest control, insecticides, deamethrin, *Glossina tachinoides*, *Glossina palpalis gambiensis*, Ivory Coast, Liberia R. 4550
 pest control, insecticides, economics, *Glossinidae*, Ivory Coast 4549
 pests, *Hylemya planura* 5619
 pheromones, comparison, capture efficiency, *Ips typographus*, Sweden 719
 pollen collections, apiculture, *Apis mellifera* 1406
 population density, *Dacus oleae*, Libya 6956
 population levels estimation, control programs, *Glossina* 2936
 population studies, methodology, *Chrysomya bezziana* 861
 sampling, larvae, *Agrotis ipsilon* 8028
 sampling methodology, *Lygus inolealis* 6108
 sex pheromone, bait, detection, *Anthonomus grandis* 703
 sex pheromone, bait, *Dioecyrtia disculosa*, USA, South Carolina 425
 sex pheromone, efficacy, pest control, *Euxoa ochrogaster* 742
 sound, sampling methodology, *Scaptomyza vicinus* 4075
 spatial distribution, mathematical models, pests detection, *Anthonomus grandis* 2242
 stored products pests, abundance, *Pnyalidae*, *Gelechiidae*, Greece 7663
 stored products pests detection, *Insecta* 3783
 surveys, geographical distribution, *Thysanoptera*, Hungary 3156
 synthetic sex pheromone attractants, response, *Popillia japonica* 1930.
- Treatment,**
 antibiotics, cytoplasm incompatibility, hybrids, *Aedes polynesiensis*, *Aedes kesseli* 5488
 arthritis, venom, *Apis mellifera* 2180
 bites, stings, medical importance, *Latrodectus mactans*, *Loxosceles reclusa*, *Chiracanthium* 627
 bites, stings, medical importance, *Scorpiones*, *Reduviidae* 629
 bites, venom, *Latrodectus* 1319
 hypersensitivity, *Dermatophagoides pteronyssinus* sensitization, oral administration, man 8434
 infection, antibiotics, cattle, *Phosphorus* 8516
 infestation, *Lyssacarus radovskyi*, *Felis domestica*, USA, Florida 2922
 infestation, man, *Pediculus* 2916
 man, infestation, carbaryl, *Pediculus humanus capitis* 3665
 scabies, case reports 648
 skin diseases, domestic animals, Sudan 2923
 skin diseases, *Sarcoptes scabiei*, *Ovis*, Sudan 2924
 stings, hypersensitization, man, *Hymenoptera* 2931.
- Trechus distigma**,
 types, taxonomy, morphology 8762.
- Tree holes,**
 decomposition, leaf litter, food sources, *Aedes triseriatus*, USA, Indiana 9377
- Trees,**
 chemical control, trunk injection, insecticides, dicotyledons, *Carya illinoensis*, *Monelliopsis nigropunctata*, *Monella caryella*, *Tinocallis caryaeformis* 8566
 drilled holes, colonization, habitat, species composition, colonization 2284
 host plants, coevolution, herbivory, *Insecta*, British Isles 2846
 infestation, nests, damage, *Camponotus pennsylvanicus*, USA, New Jersey 8480
 larvae, habitat preferences, ecological distribution, *Culicidae*, USA, Ohio 1951
 oviposition, egg-throwing, *Mecistogaster jocosus*, Bolivia 6677
 pest control, barriers, alkathene bands, *Mangifera indica*, *Drosicha mangiferae* 7748
 pest control, barriers, *Mangifera indica*, *Drosicha mangiferae* 7754
 pest control, pheromones inhibitors, *Dendroctonus frontalis*, *Ips avulsus* 3788
 pests damage, assessment methodology, *Choristoneura fumiferana* 8866
 reoccupation, climbing, larvae, *Neodiprion sertifer*, Finland 5222
 spatial distribution, pupae, eggs, *Colaradia pandora*, USA, Arizona 6035
 species composition, sampling methodology, *Insecta* 6842
 tree holes, habitat, oviposition, larvae, *Hadrothemis scabrifrons* 3524.
- Trehalase,**
 activity, development, reproduction, *Dysdercus koenigii* 8941.
 α,α-Trehalase,
 enzymes, flight muscle, *Locusta migratoria* 4959
 hemolymph enzymatic activity, induction, *Apis mellifera* 164
 isolation, purification, *Harmonia axyridis* 944.
- Trehalose,**
 effects on pathogens growth, *Nomuraea rileyi*, *Noctuidae* 1812
 hemolymph, comparative studies, hybrids, *Apis mellifera* 7741

- Trematopygus spiniger**,
 n-w records, geographical distribution, Sweden 4724.
- Tremulius**,
 new genera, taxonomy, morphology 8754.
- Tremisius besaunoni**,
 new species, taxonomy, morphology, Israel 8754.
- Tremisius inexpectatus**,
 new species, taxonomy, morphology, Turkey 8754.
- Trepobates carri**,
 new species, taxonomy, morphology, Guatemala 5578.
- Trepobates polhemii**,
 new species, taxonomy, morphology, Mexico 5578.
- Triacylglycerol**,
 energy resources, metabolism, developmental stages, *Stomoxys calcitrans* 4159.
- Triacylglycerol lipase**,
 activity, γ radiation effects on, *Dacus dorsalis* 7355.
- Trisenodes similans**,
 new records, geographical distribution, Denmark, Gudenaa R. 6317.
- Trialeurodes abutilonea**,
 pest outbreaks, damage, crop fields, USA, California 9290.
- Trialeurodes vaporariorum**,
 biological control, pathogens, *Verticillium lecanii* 2217.
 biological control, pathogens, *Verticillium lecanii* 4623.
 biological control, pathogens, *Verticillium lecanii* 8577.
 biological control, pest control, parasites 7778.
 control programs, biological control, parasites, *Encarsia formosa* 1424.
 development, host plants effects on, pest control, parasites, *Encarsia formosa* 7726.
 development, temperature effects on 5823.
 diurnal variations, diurnal variations, seasonal variations 9116.
 host plants, pest resistance, *Lycopersicon hirsutum*, *Solanum pennellii* 9283.
 orientation, visual perception, color, light 8265.
 pest control, biological control, greenhouses, *Encarsia formosa*, Japan 7789.
 pest control, biological control, predators, *Anthracis nemorum* 7708.
 pest control, insecticides, New Caledonia 4558.
 pesticides, efficiency, pest control 9291.
- Triatoma infestans**,
 bites, hypersensitivity, man 1375.
- Triatoma**,
 digestive tract, pathogenesis, *Trypanosoma cruzi* 5022.
 taxonomy, morphology, Cuba 5536.
- Triatoma arthurneivai**,
 habitat, *Trypanosoma cruzi* vectors, disease reservoirs, Brazil, Minas Gerais State 5283.
- Triatoma brasiliensis**,
 disease transmission, *Trypanosoma cruzi*, Brazil 5286.
- Triatoma infestans**,
 biosynthesis, chitin, inhibition, antibiotics, tunicamycin 6587.
 Chagas disease vectors, surveys, methodology 8437.
 chemical control, insecticides, systems, *Canis familiaris* 6059.
 developmental stages, stridulatory apparatus morphology 70.
 disease transmission, *Trypanosoma cruzi*, Brazil 5286.
 dispersal, flight activity, marking, Brazil, Argentina 1263.
 ecdysone, metabolism 3522.
 flight activity, lipid metabolism, energetics 4955.
 flight activity, sex differences 3275.
 genes, isoenzymes, genetics, Bolivia 4668.
 lipid biosynthesis, fat body, testes 191.
 lipids, fatty acid composition 192.
 pathogens, virions, salivary gland 3421.
 population studies, comparison, isoenzymes, genes, Bolivia 4692.
 rearing, simulation blood meals 2002.
- Triatoma protracta**,
 hypersensitivity, immunotherapy, antigens, organ culture 4522.
 hypersensitivity, man, immunotherapy 4521.
- Triatoma pseudomaculata**,
 disease transmission, *Trypanosoma cruzi*, Brazil 5286.
- Triatoma sordida**,
 disease transmission, *Trypanosoma cruzi*, Brazil, feeding behavior, *Trypanosoma cruzi* vectors, *Triatoma sordida*, *Triatoma brasiliensis*, *Triatoma pseudomaculata*, *Triatoma infestans*, *Panstrongylus megistus*, *Rhodnius nasutus*, Brazil 5286.
 temperature effects on growth, survival 9082.
- Tribolium**,
 population growth, population dynamics, probability 3647.
 secretions, 2-methyl-1,5-benzoquinone, 1-ethyl-1,4-benzoquinone, effects on erythrocytes, rats 6617.
- Tribolium castaneum**,
 aggregation pheromone, chemical composition, attractancy 2591.
 aggregation pheromone, synthesis 2594.
 chemical control, growth regulators, development disruption, bis (thiocarbamate) R-31026, juvenoid R-20458 6130
 X chromosome, glucose-6-phosphate dehydrogenase genes localization 9387.
 cold acclimation, temperature effects, coma, oxygen consumption 3369.
 cyclic GMP levels, development 9057.
 development rates, variation 1088.
 diets, grains, effects on development, population growth 9048.
 eggs, emergence, inhibition, insecticides, benzoxyphenyl urea, toxicology, biological control 3451.
 fumigants, effects on fecundity, pesticide resistance, phosphine 7692.
 genetics, mating behavior, male selection, strains 6275.
 histology, aggregation pheromone glands 8115.
 hosts, pathogens effects on growth, development, *Farinocytis tribolii* 1027.
 hybridization, *Tribolium freemani* 3916.
 infection, effects on sex ratio, pathogens, *Nosema whitei* 6036.
 insecticides, synergism, toxicity 7405.
 males, aggregation pheromones, production site location, aggregation behavior 220.
 pest control, juvenile hormones analogs 2239.
 pest control, stored products, air flow 6092.
 pest control, stored products, antifedants, repellents 7729.
 pest control, stored products, growth regulators 3787.
 pest control, stored products, insecticides 2190.
 pest resistance, host plants, *Zea mays* 6931.
 pests, chemical control, phosphine resistance 1046.
 pests, stored products, fumigation, methyl bromide, phosphine 6627.
 pests, stored products, *Manihot esculenta*, Malaysia 5386.
 pests, stored products, peanuts, pesticide resistance, insecticides, USA.

Tribolium castaneum, (continued)

- Southeast 4223.
 pests, stored products, pesticide resistance, Switzerland 6921.
 photokinesis, activity patterns, habitat preferences 2787.
 photokinesis, photokinesis, light, effects on locomotor activity 5127.
 population growth, grain, stored products pests 5344.
 population growth, population dynamics, probability, mathematical models 3647.
 population studies, subdivision, population genetics, fecundity 3603.
 proteinase, characterization, isoelectric focusing 5692.
 reproduction, stored products pests, *Oryza sativa* 7679.
 selection, egg production, development, population genetics 1980.
 sex ratios, genetic factors, selection 1561.
 stored products pests, chemical control 5354.
 stored products, pests detection, traps 3783.
 stored products pests, development, wheat-soy drink mix 9323.
 stored products pests, pesticide resistance 8205.
 stored products pests, phosphine toxicity 1051.
 stored products pests, phosphine toxicity, atmospheric conditions effect on 1050.
 stored products pests, population dynamics, Triticum 5330.
 strains, comparison, microsome, enzymatic activity, cytochrome levels 3326.
 strains, malathion, pirimiphos-methyl pesticide resistance, genetic variance 7394.
 toxicity, fumigants, productivity, comparative studies, *Sitophilus oryzae* 1074.
 toxicity, insecticides, lindane, DDT, irradiation 7418.
 toxicity, insecticides, synergism, isodilaplopy alcohol 7416.
 toxicity, methyl bromide, phosphine 1073.
 toxicity tests, insecticides, mutants 7397.
- Tribolium confusum**,
 aggregation pheromone, chemical composition, attractancy 2591.
 aggregation pheromone, synthesis 2594.
 chemical control, growth regulators, development disruption, bis (thiocarbamate) R-31026, juvenoid R-20458 6130.
 juvenile hormones analogs effects on development 2258.
 juvenile hormones, morphogenesis, bioassays, methodology 4917.
 larvae, development, environmental effects, temperature, diets 2687.
 nutrition, pest control, processed foods 8078.
 parasites, infectivity, evolution, *Hymenolepis citelli*, 8998.
 pest control, stored products, insecticides 7768.
 pests, stored products, chemical control, growth regulators, CGA-28772 9331.
 pests, stored products, community composition, seasonal variations, species diversity, Japan 3640.
 pests, stored products, growth regulators, CGA-28772 6103.
 pests, stored products, pesticide resistance, Switzerland 6921.
 photokinesis, activity patterns, habitat preferences 2787.
 photokinesis, photokinesis, light, effects on locomotor activity 5127.
 population genetics, evolution, group selection 9426.
 population growth, population dynamics, probability, mathematical models 3647.
 repellents, chemical analysis, esters, mandelic acid 222.
 stored products pests, phosphine toxicity 1051.
 stored products pests, phosphine toxicity, atmospheric conditions effect on 1050.
 toxicity, methyl bromide, phosphine 1073.
- Tribolium freemani**,
 biology, development, hybridization, *Tribolium castaneum* 3916.
 development, body size, body weight 8217.
 population density, larvae, effects on pupation 7469.
- Tribolium sinense**,
 taxonomic revision, morphology, phylogeny, Africa 7168.
- Trichacidion penicillium**,
 new species, new genera, taxonomy, morphology, Venezuela 4780.
- Trichaphaeos raffaldianus**,
 new species, taxonomy, morphology, France 8746.
- Trichaporus**,
 taxonomy, synonymy 2450.
- Trichatela**,
 new species, taxonomy, morphology, Ecuador 5611.
- Trichitium boucomonti**,
 geographical distribution, Scarabaeidae, Brazil 4109.
- Trichitium hirsutum**,
 morphology, geographical distribution, Brazil 4109.
- Trichiura venae**,
 new species, taxonomy, morphology 4040.
- Trichiura venae witti**,
 new subspecies, taxonomy, morphology, Bulgaria 4046.
- Trichloron**,
 insecticides, photoperiod, effects on sensitivity, *Musca domestica* 7419.
 insecticides, toxicity, sterility, *Blattella germanica* 1829.
- Trichlorophos**,
 insecticides, field trials, chemical control, *Calocoris norvegicus*, *Sidna* Linberg 8476.
- Trichocortia verticalis verticalis**,
 new records, New Caledonia 4748.
- Trichocylliba**,
 taxonomy, morphology 3975.
- Trichodonia**,
 taxonomic revision, morphology, keys 5558.
- Trichoduboscia epeol**,
 parasitism, new records, *Rhithrogena iridina* 5232.
- Trichogramma**,
 abundance, crop fields, Zia mayas, USA, Maryland 5600.
 biometrics, comparative studies 1707.
 enzymes, comparative studies, genetic analysis 197.
 host-parasite interactions, larvae, *Rachpilusia* ou, *Autographa biloba*, USA, Florida 1294.
 new records, new species, Hawaii 8820.
 new species, hosts, keys, identification, USA, Hawaii 4021.
 parasites, eggs, *Heliothis*, USA, Texas 4383.
 parasites, pest control, biological control, methodology, *Heliothis* 1448.
 parasitism, plant extracts, biological control, *Heliothis* zea 5382.
 parasitoids, biological control, control programs 1421.
 parasitoids, host searching behavior, eggs, *Heliothis* zea 5940.
 parasitoids, hosts age effects on eggs, suitability, *Sepdon fuacipennis* 8320.
 pest control, control programs, forests, China 2216.
Sitotroga cerealella, mass rearing, methodology 4091.
- Trichogramma australicum**,
 nontarget organisms, toxicity, insecticides 5050.
 pest control, insecticides, persistence, toxicity 3020.

- Trichogramma brasiliensis**,
 rearing, *Coryca cephalonica* eggs, UV radiation, temperature effects on 7450.
- Trichogramma brevicapillum**,
 life tables, oviposition, competition, companion, *Trichogramma pretiosum* 7424.
 sexual reproduction, development, morphology, immature stages, environmental factors, parasitism, *Trichoplusia ni* 7422.
- Trichogramma chilona**,
 parasitoids, host preferences 7544.
- Trichogramma evanescens**,
 enzymes, characterization 2558.
 new species, morphology, taxonomy 2455.
- Trichogramma exiguum**,
 parasitoids, host preferences 7544.
- Trichogramma ivelae**,
 biological control, pests, *Heliothis punctiger* 1410.
- Trichogramma japonicum**,
 morphology, taxonomy, USA, Hawaii 4021.
 parasites, suitability tests, *Chilo auricilius* 1217.
- Trichogramma julianoi**,
 new species, taxonomy, morphology, USA, New York 4867.
- Trichogramma maidis**,
 biometrics, identification 1707.
 enzymes, characterization 2558.
- Trichogramma marylandense**,
 new species, taxonomy, morphology, USA, Maryland 5600.
- Trichogramma minutum**,
 parasitoids, body size, sex differences 8323.
 parasitoids, hosts eggs susceptibility, *Chorstoneura fumiferana* 8329.
- Trichogramma subulale**,
 biometrics, identification 1707.
- Trichogramma perkiasi**,
 morphology, terminology, USA, Hawaii 4021.
 nontarget organisms, toxicity, insecticides 5050.
 pest control, insecticides, persistence, toxicity 3020.
- Trichogramma pretiosum**,
 biological control, kairomones, effects on host searching behavior, *Heliothis* zea 423.
 eggs parasites, hosts population density effects on fecundity 4373.
 host searching behavior, dispersal, host-parasite interactions, *Heliothis* zea, USA, Georgia 2023.
 kairomones, host searching behavior, hosts, eggs, biological control 3357.
 life tables, oviposition, competition, comparison, *Trichogramma brevicapillum* 7424.
 parasitoids, host selection, eggs, *Heliothis virescens* 2815.
- Trichogramma ribanae**,
 new species, taxonomy, morphology, France, Alsace 4876.
- Trichogramma schuberti**,
 new species, taxonomy, morphology, France, Alsace 4876.
- Trichogramma grammodes**,
 superparasitism, intraspecific relationships, fecundity 1226.
- Tricholeiochiton**,
 new records, geographical distribution, morphology, Australia 8703.
- Tricholeiochiton fagesii**,
 new records, geographical distribution, Denmark, Gudenaa R. 6317.
- Tricholeptomyia**,
 taxonomic revision, reclassification, Oriental Region 6394.
- Tricholoprocetia beta**,
 morphology, immature stages, Australia 2504.
- Tricholoprocetia impatiens**,
 morphology, immature stages, Australia 2504.
- Tricholoprocetia tryoni**,
 morphology, immature stages, Australia 2504.
- Trichomulus**,
 parasites, taxonomy, synonymy 5592.
- Trichomes**,
 egg laying effects on, *Triticum aestivum*, *Oulema melanopus* 9328.
- Trichomyia liscose**,
 morphology, taxonomy 5565.
- Trichomyia malickyi**,
 new species, taxonomy, morphology 5565.
- Trichomyia parvula**,
 morphology, taxonomy 5565.
- Trichomyia urbana**,
 morphology, taxonomy 5565.
- Trichomyiinae**,
 taxonomy, morphology, keys 5565.
- Trichomyodrys**,
 taxonomic revision, identification keys, Brazil 4778.
- Trichomyodrys cinctus**,
 new species, taxonomy, morphology, Brazil 4778.
- Trichomyodrys medamus**,
 new species, taxonomy, morphology, Brazil 4778.
- Trichoplasta**,
 taxonomic revision, nomenclature, types 7990.
- Trichoplusia ni**,
 abundance, activity patterns, agricultural ecosystems 2163.
 abundance, crop fields, agricultural practices effects on 3035.
 antennae, morphology 3257.
Beauveria bassiana, bioassays, pathogens 8984.
 biochemistry, juvenile hormone esterase, inhibition, trifluoromethylketones 5790.
 biological control, field trials, efficacy, *Bacillus thuringiensis* 6147.
 biological control, nuclear polyhedrosis virus DNA, infectivity 1034.
 biological control, pathogens persistence, *Bacillus thuringiensis* 724.
 biological control, predators, crop field, *Labidura riparia* 2222.
 cell lines, β -N-acetylglucosaminidase secretion, enzymatic activity 96.
 cell lines, imaginal discs, wings, protein biosynthesis 8896.
 chemical control, insecticides, efficacy 3799.
 chromatin isolation, proteins, DNA 7049.
 development markers, juvenile hormones, enzymatic activity 2723.
 digestion fluids, *Autographa californica* nuclear polyhedrosis virus 5742.
 environmental factors, parasitism, *Trichogramma brevicapillum* 7422.
 enzymes, chitin synthase, integument, characterization, inhibition 6559.
 excretory products, oviposition deterrents 4269.
 granulosis virus, pathogenicity 5752.
 hosts, development, parasites effects on, *Copidosoma truncatellum* 8327.
 infection, nuclear polyhedrosis virus, effects on parasitoids, *Voria ruralis*

Trichoplusia ni, (continued)

2036.
infection, susceptibility, mortality, pathogens, *Nomuraea rileyi* 5755
insecticides, malathion, malathion, metabolism, degradation 316
juvenile hormone esterase distribution, proteins, juvenile hormones metabolism 206
juvenile hormone esterase, purification 939.
larvae, biological control, nuclear polyhedrosis virus infection 1036.
larvae, cell culture, nuclear polyhedrosis virus, proteins, enzyme-linked immunosorbent assay 1091.
larvae, digestive tract fluids, enzymatic activity 1749
larvae mortality, pathology, nuclear polyhedrosis virus 269
males flight activity, sex pheromone components effects on 419
nuclear polyhedrosis virus, infection, DNA polymerase induction 1035
olfaction, pheromones catabolism, antennae, enzymatic activity 4168
oviposition, site selection, host plants, *Lycopodium esculentum* 2081
parasitoids, seasonal variations, crop fields, USA, Florida 4374
pathology, infection, mortality, nekteris-like organisms, USA, California 5731
peritrophic membranes synthesis, development, ultrastructure, electron microscopy (scanning) 340.
pest control, insecticides, *Bacillus thuringiensis*, cultivars, *Brassica oleracea* 1834.
pest control, nuclear polyhedrosis virus, transmission, *Podium maculiventris* 3911.
pest control, pathogens, adjuvants, efficacy 8457
pest control, *Phaseolus vulgaris* 709
pesticides, profenofos, effects on biological activity 5775
pests, biological control, bioassays, pathogenicity, methodology, *Beauveria bassiana* 4094
pests, feeding, damage, crops, *Brassica oleracea* 8502
pests, feeding site preferences, *Apium graveolens* 8550
pests, infestation, vegetables, sampling 2196.
pheromones catabolism, molting effects on 227.
pheromones degradation, enzymatic activity, cuticle 4169.
population density - surveys, pheromone traps, USA, Louisiana 8516.
prostadlandins, reproductive organs, pheromone emission 8097
sex pheromone, assays, methodology 4913
sex pheromone attractancy, habituation 2763
sex pheromone, attractants, pheromone traps, *Scutis orbicularis* 1787
sex pheromone components effects on males flight activity 1927.
solubility, Autographa californica nuclear polyhedrosis virus, digestion fluids 4201.
spatial distribution, host plants, sampling, methodology 6107.
survival, dispersal, rearing comparison 1168
synthetic sex pheromone, attractancy 7335
temperature effects on toxicity, insecticides 8206
toxicity *Bacillus thuringiensis* toxins 5765
virulence, pathogens, Autographa californica nuclear polyhedrosis virus 3417
Trichopoda oxygramma,
population density, surveys, pheromone traps, USA, Louisiana 8516
Trichopoda giacomelli,
parasitoids, effects on hosts abundance, *Nezara viridula* 2018
Trichopoda pennipes,
parasitism, effects on longevity, reproduction, *Nezara viridula* 5936
parasitism, estimation methodology, *Nezara viridula* 2030
parasitism, *Nezara viridula* 1898.
Trichopoda plumipes,
parasitism, oviposition, host specificity, *Brochymena*, USA, Texas 2024.
Trichopria,
taxonomy, morphology 4868.
Trichopria billaevora,
new species, taxonomy, morphology 4868
Trichopria cubensis,
population density, cycles, host-parasite interactions, *Diatraea*, Trinidad 5986
Trichopria fumipennis,
new species, taxonomy, morphology 4868
Trichoprosopon,
taxonomy, reclassification 6400.
Trichoprosopon digitatum,
biological control, pathogens, *Bacillus thuringiensis* 630
Trichoptera,
cells brain, neurosecretions, biochemical analysis, 992
check lists, flight activity, adults, USA, Pennsylvania, Linesville Creek 7027
check lists, USA, Virginia 3935.
dimorphism, *Lepidoptera* 8879.
enzymatic activity, digestive tract, diets 1757
exocrine glands, defence secretions, evolution 3388
larvae, check lists, streams, freshwater ecosystems, Netherlands 1574
new records, USA, Ohio 3150.
new species, Eurasia 4067.
new species, Mediterranean Region 4066.
new species, taxonomy, morphology, new records, Finland 1570.
occurrence, seasonal variations, annual variations, species composition, Finland 8673.
pollution effects, sedimentation, nutrient enrichment, species richness, species diversity, streams, USA, Appalachian Mts. 7815.
species composition, distribution, seasonal variations, streams, USA, Florida 7018.
species composition, taxonomy, morphology, Australia, Southwest 7244
Trichopterna fatransis,
abundance, habitat, Czechoslovakia 5223.
Trichoptoides decolor,
cattle pests, abundance, British Isles, Scotland 736
Trichosirocalus horridus,
biological control, weeds, environmental impact, *Cynara scolymus* 531
predators, life history, weed control, *Carduus* 1979.
Trichosurus caninus,
parasites infestation, habitat, *Ixodidae*, *Acari*, infestation 6776
Tricoptera,
benthos, overwintering, sediments, ice, Sweden, Vindelälven R. 3648
photoperiods, environmental effects, phenology, emergence, Austria 3864
Tricorynus,
taxonomy, morphology, keys, synonymy 2403.
Tricorynus distinctus,
taxonomy, morphology, synonymy, keys 2403.

- Tricorynus dudleyae**,
new species, taxonomy, morphology, USA 2400.
Tricorynus fuliginosa,
new species, taxonomy, morphology, USA 2400.
Tricorynus herbarius,
taxonomy, morphology, synonymy, keys 2403.
Tricorynus rubiventris,
taxonomy, morphology, synonymy, keys 2403.
Tricorynus subglaber,
taxonomy, morphology, synonymy, keys 2403.
(Z)-9-Tricosene,
muscature, biosynthesis, *Musca domestica* 229.
Tridepla nova,
pest outbreaks, host plants, *Atriplex canescens*, USA, Arizona 6795.
Trielis octomaculata,
abundance, phenology, geographical distribution, USA, Texas, Rio Grande Valley 1975.
Triepolus mesilae,
new records, geographical distribution, association, *Heliothis occidentalis*, USA, Illinois 5535.
Triethylenemelamine,
effects on sex chromosomes breakage, spermatozoa, storage females, *Drosophila melanogaster* 1515.
Trifluoromethylketones,
biochemistry, juvenile hormone esterase, inhibition, *Trichoplusia ni* 5790.
Trifolium,
pests, abundance, seasonal variations, Egypt 6978.
Trifolium alexandrinum,
host plants, abundance, species composition, Insecta, Egypt 6811.
Trifolium alexandrinum,
crop fields, abundance, predators, parasites, Insecta, Egypt 6876.
pests, infestation, damage, *Bruchus afflicti* 6964.
Trifolium hybridum,
infection, bean yellow mosaic virus, *Phytophthora*, *Acyrtosiphon pisum* 8524.
Trifolium pratense,
interspecific relationships, pollination, coevolution, *Bombus* 5195.
Trifolium repens,
crop fields, host plants, feeding behavior larvae, *Wisena* 3568.
pasture yield, damage, *Teleogryllus commodus* 2254.
plant extracts, feeding deterrents, *Heteronychus arator* 6912.
seeds, phenology, behavior, morphology, *Apis mellifera* 1970.
Trifurcula cryptella,
new records, geographical distribution, Denmark 5515.
parasites, emergence, infestation 5180.
Trifurcula gozmanyi,
new species, taxonomy, morphology, Hungary, Budapest 8677.
Trifurcula hannoverella,
new records, geographical distribution, Denmark 5515.
Trifurcula rodella,
new species, taxonomy, morphology, Europe 7997.
Trigona,
colonies, new records, geographical distribution, South Africa 2372.
feeding behavior, competition, *Phaethoniscus pilosus*, Costa Rica 3571.
Trigona denotti,
nests structure, thermoregulatory behavior 2280.
new records, geographical distribution, South Africa 2372.
Trigona dominicana,
morphology, taxonomy, fossils, Dominican Republic 6335.
Trigona ferricauda,
competition, nectar, foraging behavior, *Phaethoniscus*, Panama 4409.
Trigona gibboides,
mandibular gland secretions, chemical composition, age effects on 8117.
new records, geographical distribution, South Africa 2372.
Trigona hyalinata,
interspecific relationships, mutualism, *Aconophora flavipes* 6750.
Trigona savannensis,
new species, morphology, castes, French Guiana 3220.
Trigona spinipes,
trail pheromone, chemical communication, chemical composition, reviews 5009.
Trigonocells gigas,
diurnal variations, heat tolerance 6581
Trilophidia annulata,
survival, development, food plants 2836.
survival, development, food plants 5201
Trimerina intemeliae,
new species, taxonomy, morphology, Italy 3997.
Trimerotropis sparsa,
morphology, wings coloration, classification, USA, Nebraska 8890
Trimethylphosphate,
effects on Y chromosome, spermatogenesis, *Drosophila hydei* 2429.
Trinervitermes,
food organisms, *Protiles cristatus*, Namibia, Namib Desert 9193.
Trinervitermes bettonianus,
sternal gland, size, trail pheromone secretion 3374.
Trinervitermes trinervoides,
aminopeptidase, purification, characterization 931
colonies effects on soil properties 6825.
Tringa totanus,
infestation, parasites, *Mallophaga* 9143
Trinidad,
crop production, pollination, *Frankliniella insularis*, *Cajanus cajan* 737.
host-parasite interactions, cycles, population density, *Diatraea*, *Trichopria cubensis*, *Parathesia clariipalis* 5986
new species, *Sampsousia sulcata* 806
new species, taxonomy, morphology, *Nephropsis bicolor* 5560.
population dynamics, environmental effects, *Trypoxylon palliditarse* 2892
wilt, disease transmission, *Oncopeltus cingulifera* 3414.
Trinoton femoratum,
parasites, morphology, biometrics, new records, *Phoenicopterus ruber*, Spain 8336
Trionymus diminutulus,
pests, infestation, *Linum usitatissimum*, British Isles, England 2096
Trionymus lounsburyi,
morphology, taxonomy, keys 6514
Triosephosphate isomerase,
+fructose-bisphosphate aldolase, multienzyme complexes, purification, characterization, flight muscle, *Ceratitis capitata* 2574

Subject Index

- Trioxys complanatus**, parasites, pest control, Therioaphis trifolii, Australia, South Australia 3821.
- Trioxa**, taxonomy, status, keys 2438.
- Trioxa brassicae**, taxonomy, morphology, keys 2438.
- Trioxa nigricornis**, taxonomy, status, keys 2438.
- Trioxa tremblayi**, taxonomy, morphology, keys 2438.
- Trioxa trigonica**, new species, morphology 2438.
- Triplax aeneus**, new records, geographical distribution, habitat, British Isles, Berkshire 6313.
- Triplaspium**, pathogens, infection, population regulation, Tetranychus evansi, Brazil 4197.
- Triplexylon attenuatum**, flight activity, phenology, life cycle 9098.
- Tripteroides**, taxonomic revision, reclassification, Oriental Region 6394.
- Trirhabda**, host plants infestation, Publilia concava effects on, Solidago altissima 2073.
- Trirhabda baccaridiae**, feeding behavior, host plants deterrents effects on, Baccharis halimifolia 5956.
- Trirhabda borealis**, flight activity, dispersal, population dynamics, habitat colonization 8360.
- Trirhabda virgata**, flight activity, dispersal, population dynamics, habitat colonization 8360.
- Trirhabda virgata**, host plants infestation, Publilia concava effects on, Solidago altissima 2073.
- Trisetacus abietisvagus**, new species, morphology, taxonomy, Japan 3170.
- Trisomy**, autosomes dosage composition, enzymes, Drosophila melanogaster 8640.
- Trissolcus euschisti**, parasitoids, reproduction, fecundity, longevity 8322.
- Trissolcus japonicus**, Synonymy, Asolcus plautiae 4020.
- Trithorax**, loci, alleles, mutation, Drosophila melanogaster 8643.
- Triticum**, crop fields damage, irrigation, fertilizer applications effects on, Microtermes obesi 5372.
- Triticum**, crop fields, pests infestation, Mayetilia destructor, USA 2191.
- Triticum**, crop fields, pests, population dynamics, Cephus cinctus 8464.
- Triticum**, fields, surveys, biotypes, Schizaphis graminum, USA, Texas 3761.
- Triticum**, cultivars, pest resistance, Sitobion avenae, Metopolophium 8567.
- Triticum**, epidemiology, pest outbreaks, population dynamics, Metopolophium dirhodum, Sitobion avenae 4393.
- Triticum**, host plants, pest resistance, breeding, Schizaphis graminum 3717.
- Triticum**, pest control, aldrin, Microtermes obesi 5371.
- Triticum**, pest control, chemical control, carbon disulfide, Lepidoglyphus destructor 8515.
- Triticum**, pests, infestation, effects on yield, Sitobion avenae 2042.
- Triticum**, seed treatments, insecticides, chemical control, pests, Microtermes obesi, India 5398.
- Triticum**, seed treatments, insecticides, permethrin, chemical control, larvae, Delia coarctata 6133.
- Triticum**, stored products, infestation, Acarus siro, Acarus farris, Aeroglyphus robustus, Lepidoglyphus destructor, Tyrophagus putrescentiae 8513.
- Triticum**, stored products, pest control, infestation, Sitophilus oryzae 7662.
- Triticum**, stored products, pests, infestation, environmental effects, Glyciphagus destructor, Acarus siro 7693.
- Triticum**, stored products, pests, population dynamics, Sitophilus oryzae, Trogoderma granarium, Tribolium castaneum 5330.
- Triticum**, varieties, susceptibility, pests, Trogoderma granarium 9304.
- Triticum**, yield, germination, seeds damage effects on, Isopatra 5331.
- Triticum**, yield, infection, barley yellow dwarf virus, vectors, Rhopalosiphum padi 8444.
- Triticum aestivum**, egg laying effects on trichomes, Oulema melanopus 9328.
- Triticum**, host plants, host preferences, varieties, Corcyra cephalonica 7674.
- Triticum**, host plants, pest resistance, effects on development, Metopolophium dirhodum 2840.
- Triticum**, host plants, pest resistance, Sitobion avenae 2986.
- Trixocetidae**, occurrence, geographical distribution, Czechoslovakia 3937.
- Trixocella obscurilla**, new records, geographical distribution, Czechoslovakia 3937.
- Trochaloschema armenica**, synonymy, Trochaloschema medusa 7947.
- Trochaloschema mikhailovi**, new species, taxonomy, morphology 7947.
- Trochilidae**, Bombus, pollinators, feeding behavior effects on flowers color, Delphinium nelsonii 1291.
- Trochosa ruficollis**, comparison, locomotion, Lycosa tarentula 887.
- Troglon palustrum**, habitat, feces, Tyto alba, Yugoslavia 4436.
- Troglonon novachibreniae**, new genera, new species, taxonomy, morphology, Papua New Guinea 4814.
- Troglonophilus cavicola**, escape behavior, geotaxis, caves 5861.
- Trogloderma granarium**, diapause, growth, age effects 1855.
- Trogloderma granarium**, fumigation, effects on productivity 5763.
- Trogloderma granarium**, host plants, susceptibility, Triticum varieties 9304.
- Trogloderma granarium**, pest outbreaks, new records, pest control, USA 3768.
- Trogloderma granarium**, pheromones olfactory perception, strains, effects on behavior 1157.
- Trogloderma granarium**, stored products pests, population dynamics, Triticum 5330.
- Trogloderma variable**, stored products pests, development, whey-soft drink mix 9323.
- Troglodermus bilineatus**, mass rearing, methodology, feeding 6477.
- Troglodermus yemenicus**, new species, Yemen 3187.
- Trombiculidae**, infection, Rickettsia tsutsugamushi, Thailand 8135.
- Trombicula**, larvae, morphology, terminology 4101.
- Trombicula**, new species, taxonomy, morphology, Afrotrombicula gabonica, Afrotrombicula vauvriei, Gabon 798.
- Trombicula**, 6 new species, taxonomy, morphology, Papua New Guinea 6339.
- Trombicula**, parasites, new species, Roussetus amplexicaudatus, Rallus torquatus, Philippines 794.
- Trombidiformes**, respiratory system, taxonomic significance 156.
- Trombicula novaeibathia**, new species, taxonomy, morphology, Papua New Guinea, New Britain 4762.
- Trochanter**, nerve 1B, ultrastructure, strand receptors, Orthoptera 8067.
- Trophallaxis**, chemical communication, castes, colonial characteristics, Apis mellifera mellifera 6992.
- Trophallaxis**, communication, antennae, information theory, Myrmica rubra 5870.
- Trophallaxis**, dispersal, localization, iodine radioisotopes, Bifiditermes besoni 2554.
- Trophallaxis**, mutualism, colonies, nesting behavior, Melipona flavipes, Melipona fasciata 6985.
- Trophallaxis**, social organization, nest provisioning, brood care, environmental effects, Tapinoma erraticum 4653.
- Trophic levels**, life history, polymorphism, Arctopsycha grandis, USA, Montana, Flathead R. Basin 1714.
- Trophic relations**, soil fauna, predators: sampling methodology 6860.
- Trophic relationships**, association, nutrient levels, Arthropoda, Drosera erythrorhiza, Australia 7555.
- Trophic status**, community composition, seasonal variations, annual variations, Syrphidae, British Isles 3617.
- Trophic status**, Zapada oregonensis, Zapada cinctipes, Capnia confusa, USA, Colorado 3855.
- Trophodynamic cycle**, life history, polymorphism, Arctopsycha grandis, USA, Montana, Flathead R. Basin 1714.
- Tropical environment**, carbon, community composition, succession, Insecta, Costa Rica 5166.
- Tropical environment**, damage, control programs, Isopatra 2067.
- Tropical environment**, entomofauna, community composition, succession, association, Heliconia, Insecta 5981.
- Tropical environment**, food sources, mutualism, plant communities, formicidae 4399.
- Tropical environment**, forests, pathogens, host specificity, Corydops, Insecta 3649.
- Tropical environment**, forests, seeds, predation, Phaeodora, Costa Rica 7604.
- Tropical environment**, habitat duration, pools, distribution, Polypodium vanderplanki, Dasyhelea thompsoni, Chronomus umicola 6832.
- Tropical environment**, pest control, reviews 7724.
- Tropical environment**, population genetics, reproductive strategy, divergence, temperate environment, Drosophila melanogaster 7057.
- Tropical environment**, sanitation, vectors, disease transmission, Culex pipiens 1356.
- Tropical environment**, sound production (biological), diurnal variations, Cicadidae 5117.
- Tropiconas capisiformis**, predator-prey interactions, Pseudophylla includens 587.
- Tropiconas**, new genera, taxonomy, Africa 1633.
- Tropiconas schmitzi**, new species, taxonomy, Africa 1633.
- Tropilaelaps ciareae**, infestation, pest control, apiculture, Apis mellifera 7750.
- Tropilaelaps ciareae**, pests, apiculture, reviews 5945.
- Tropilaelaps koenigermus**, new species, taxonomy, parasites, Apis dorsata, Sri Lanka 3973.
- Tropilaelaps jolyi**, new species, Venezuela 3184.
- Trox**, wings, flight, morphology, environmental effects, habitat 4954.
- Trybliographa**, taxonomy, morphology 4879.
- Tryboryza nivella**, pests, abundance, agricultural practices effects on, Saccharum officinale 6951.
- Trysion albitarsatum**, records, keys, Australia 1582.
- Trysion flavipes**, records, keys, Australia 1582.
- Trysion mindanensis**, records, keys, Australia 1582.
- Trypanophelos**, new genera, taxonomy, Cuba 7167.
- Trypanophelos necropinus**, new species, taxonomy, morphology, Cuba 7167.
- Trypanosoma**, African trypanosomiasis, epidemiology, Africa, conferences 1334.
- Trypanosoma**, control programs, decamethrin, male sterility, Glossina, Upper Volta 1345.
- Trypanosoma**, disease control, reviews, Glossina, Africa 6052.
- Trypanosoma**, disease control, vectors plantations colonization effects on, Glossina pallidipes, Africa 1267.
- Trypanosoma**, disease transmission, African trypanosomiasis, cattle, Diptera 1338.
- Trypanosoma**, disease transmission, environmental factors, Glossina 1337.
- Trypanosoma**, disease transmission, environmental factors, Glossina, Uganda, Kenya 1347.
- Trypanosoma**, disease transmission, population density, ecological distribution, Glossina palpalis palpalis, Ivory Coast 1342.
- Trypanosoma**, disease transmission, water management effects on, vegetation patterns, geographical distribution, Glossina 1344.
- Trypanosoma**, host-parasite interactions, pathology, Glossina 1021.
- Trypanosoma**, infection, culture systems, feeding methodology, Glossina 6476.
- Trypanosoma**, infection, ecological distribution, Glossina longipennis, Kenya 3676.
- Trypanosoma**, infection, seasonal variations, Glossina pallidipes, Kenya 1347.
- Trypanosoma**, nutrient requirements, hosts salivary gland secretion, Glossina morsitans 983.
- Trypanosoma**, transmission, Glossina 2915.
- Trypanosoma**, transmission, role, Glossina morsitans morsitans, sterile-release 5277.
- Trypanosoma brucei**, African trypanosomiasis, disease control, Glossina, Uganda 4495.
- Trypanosoma**, disease transmission, antigenic characteristics, Glossina morsitans 3675.
- Trypanosoma**, infection, effects on salivary gland secretions, Glossina morsitans morsitans 8155.

- Trypanosoma brucei**, (continued)
parasites, infectivity, genetic factors, *Glossina morsitans* 4185
pathogens, disease transmission, salivary gland *Glossina morsitans* 3674
sexual reproduction, parasites, *Glossina morsitans morsitans* 2631
transmission, role, *Glossina morsitans morsitans*, sterile-release 5277
vectors, geographical distribution, *Glossina tachinoides*, Togo 1326
- Trypanosoma brucei brucei**,
continuous culture, pathogens, trypanosomiasis, *Glossina morsitans* 8419
- Trypanosoma brucei gambiense**,
disease reservoirs, disease transmission, *Glossina*, Africa, West 1339
disease reservoirs, ecological distribution, *Glossina palpalis*, *Glossina tachinoides*, Africa, West 1343
- Trypanosoma brucei rhodesiense**,
factors affecting infection, *Glossina morsitans* 4525
parasites, pathology, gastrointestinal tract, *Glossina morsitans* 1020
- Trypanosoma congolense**,
disease transmission, infectivity, *Glossina morsitans* 1340
infection, *Glossina morsitans*, susceptibility inheritance 8158
infection, seasonal variations, *Glossina palpalis*, Kenya 1318
transmission, role, *Glossina morsitans morsitans*, sterile-release 5277
- Trypanosoma cruzi**,
disease transmission, *Triatoma sordida*, *Triatoma brasiliensis*, *Triatoma pseudomaculata*, *Triatoma infestans*, *Panstrongylus megistus*, *Rhodnius nasutus*, Brazil 5286
pathogenesis, digestive tract, *Triatoma* 5022
vectors, disease reservoirs, habitat, *Triatoma arthurneivai*, Brazil, Minas Gerais State 5283
- Trypanosoma melophagium**,
pathogenesis, *Melophagus ovinus* 285
- Trypanosoma rangeli**,
parasites, detection methodology, vectors, *Rhodnius prolixus* 4486
- Trypanosoma rhodesiense**,
disease transmission, control programs, man, cultural characteristics, *Glossina*, Africa, East 1341
- Trypanosoma vivax**,
infective rates, vectors, blood meals, *Glossina morsitans morsitans*, *Glossina morsitans centralis* 8408
infection, seasonal variations, *Glossina palpalis*, Kenya 1318
transmission, role, *Glossina morsitans morsitans*, sterile-release 5277
transmission, vectors, *Glossina morsitans morsitans*, *Glossina morsitans centralis* 3681
- Trypanosomidae**,
pathogens, identification, Insecta 5032
- Trypanosomiasis**,
disease transmission, control programs, trapping, *Glossina*, Congo, People's Rep. 9244
disease transmission, epidemiology, *Glossina fuscipes fuscipes*, Congo, People's Rep. 9243
disease transmission, epidemiology, *Glossina*, Ivory Coast 9240
disease transmission, population dynamics, *Glossina*, Ivory Coast 9264
disease transmission, population levels, *Glossina*, Ivory Coast 9238
disease transmission, socio-economic aspects, *Glossinidae*, Africa 652
pathogens, continuous culture, antigenic variants, *Trypanosoma brucei brucei*, *Glossina morsitans* 8419
- Trypoxylum**,
taxonomy, new species, 30 species, new subspecies, 6 subspecies, Society Is. 831
- Trypoxylum irritans**,
nesting behavior, sexual reproduction, social interactions, Costa Rica 6980
- Trypoxylum midium schultzei**,
nesting behavior, sexual reproduction, social interactions, Costa Rica 6980
- Trypoxylum saundersi**,
nesting behavior, sexual reproduction, social interactions, Costa Rica 6980
- Trypoxylon**,
pheromone traps, efficacy, spatial distribution effects on 9302
trapping, synthetic host plants pheromones 701
- Trypoxylon domesticum**,
trapping, synthetic host plants pheromones 701
- Trypoxylon lineatum**,
aggregation pheromone, lineation, allelochemical activity, biochemistry, competition 1776
catching methods, pheromone traps, wood 8573
pheromone traps, attractancy, population studies 5704
phototaxis, light wavelength effects on 2753
trapping, synthetic host plants pheromones 701
- Trypoxylon signatum**,
trapping, synthetic host plants pheromones 701
- Trypoxylon incertulas**,
chemical control, phenyl carbamates 2999
insecticides, toxicity, pest control 1848
kairinones effects on parasites oviposition, *Tetrastichus schoenobii* 1218
paddy field damage, infestation, predation 3001
- Trypoxylon arella**,
pests, infestation, seasonal variations, *Saccharum officinale*, Bangladesh 1246
- Trypoxylon**,
taxonomic revision, morphology, *Formosa* 4884
taxonomy, morphology, new species, keys 4882
- Trypoxylon figulus**,
flight activity, phenology, life cycle 9098
- Trypoxylon palliditarsis**,
population dynamics, environmental effects, Trinidad 2892
- Trypoxylon papuanum**,
records, keys, Australia 1582
- Trypoxylon schmidelknechti**,
records, keys, Australia 1582
- Trypoxylon teneocellum**,
hosts, parasites, new species, *Lepidophora trypoxylon* 2414
- Trypamine**,
synthesis, *Epilachna vigintioctopunctata* 8946
- Tryptophan**,
metabolism, mutation, neurons, *Drosophila melanogaster* 1534
- Tryptophan pyrrolase**,
activity, fat body, *Schistocerca gregaria* 8938
- Tsuga canadensis**,
hosts, ectoparasites life history, *Florinia externa*, USA, Pennsylvania 437
- Tuberomembrana**,
new genera, morphology, China, People's Rep. 24
- Tuberomembrana xizangensis**,
new species, morphology, China, People's Rep. 24
- Tubulin**,
gene expression, embryogenesis, *Drosophila melanogaster* 3066
- α -Tubulin**,
transcription, genes, *Drosophila melanogaster* 6242
- Tucanales**,
new genera, morphology, taxonomy 2382
- Tucanales podagraceae**,
new species, morphology, taxonomy 2382
- Tularemia**,
disease transmission, epidemiology, *Yersinia enterocolitica*, USSR, Stavropol 9232
- Tumor cells**,
ultrastructure, cytochemistry, hemopoietic system, hemolymph, mutants, *Drosophila melanogaster* 6516
- Tumorigenesis**,
mutants, sterility, *Drosophila melanogaster* 3093
- Tundra**,
diets, food preferences, larvae, *Tipulidae*, USSR 6738
leaf litter decomposition, nutrient cycles, soil fauna, Arthropoda, USA, Alaska 5989
life cycle adaptations, *Tipula carinifrons* 9111
ponds, life cycle, *Chironomus*, USA, Alaska 5149
- Tunicamycin**,
antibiotics, inhibition, biosynthesis, chitin, *Triatoma infestans* 6587
effects on fat body protein biosynthesis, *Galleria mellonella* 6556
- Tunisia**,
association, Ascomycetales, Coleoptera 9152
case surveys *Scorpiones* venom envenomation, man 8417
morphology, taxonomy, Acariidae, Anoetidae 2385
surveys, new species, *Braconidae* 2449
- Turf**,
mowing, survival, *Endria inimica*, *Oscinella frit* 6132
- Turkey**,
feeding, competition, succession, diel variations, species composition, *Formica* 6744
geographical distribution, *Auchenorrhyncha* 4735
geographical distribution, biology, *Bruchida* 1945
morphology, taxonomy, *Lignyodes* 4802
new records, geographical distribution, *Brahmaea ledereri* 5513
new species, new records, *Ephemeroptera*, *Ecdyonurus resilli*, *Rhithrogena theisingeri* 4006
new species, taxonomy, morphology, *Acanthophris capicini* 5545
new species, taxonomy, morphology, *Nomada* 4028
new species, taxonomy, morphology, *Spermophagus caricus* 8777
new species, taxonomy, morphology, *Temniscus inexpectatus* 8754
new species, taxonomy, morphology, *Zygana araxis kurti* 4051
parasitoids, new species, taxonomy, morphology, *Asolus lodes*, *Telenomus turcius*, new records, geographical distribution, *Asolus semistriatus* 7989
parasitoids, new species, taxonomy, morphology, *Telenomus punctigaster*, *Telenomus homopterae*, *Asolus turkarakandas* 7988
pests, occurrence, damage, crop fields, *Poecilimon borboricus* 4537
population regulation, pest control, *Parus*, Insecta 619
species lists, Issidae 4737
species lists, taxonomy, distribution, *Nemopteridae* 4738
taxonomy, morphology, reviews, *Nemopteridae* 4727
- Turkey, Anatolia**,
new species, taxonomy, morphology, *Tingis seidenstueckeri* 4855
- Turkey, Tatos Mts.**,
new species, taxonomy, morphology, *Plinthus pawlowski* 19
- Turneromyia melancholicus**,
prey 2146
- Turnip mosaic virus**,
disease transmission, role, helper factor, *Myzus persicae* 3706
effects on pest resistance, *Brassica rapa*, *Myzus persicae*, *Brevicoryne brassicae* 3830
- Turnover**,
biomass, habitat utilization, food, *Chorthippus parallelus* 7624
- Turrutus socialis**,
species composition, species diversity, grasslands, Austria 6869
- Tuxentulus boedvarsoni**,
new species, taxonomy, morphology, USA, Alaska 4062
- Tuzetia debaiesi**,
infection, *Simulium vittatum* 3405
- Tychius crassirostris**,
geographical distribution, new records, British Isles 6303
- Tychius haematopus**,
taxonomy, morphology 6303
- Tychobothrus strinati**,
new species, taxonomy, morphology, cavernicolous species, USA, Tennessee, Warren Co 4815
- Tydeidae**,
decomposition, leaf litter, deserts 2132
decomposition, leaf litter, deserts 2133
- Tydeus lewisii**,
new genera, taxonomic revision 7948
- Tylana carinata**,
morphology, *Mascarenes* 4866
- Tylana cristata**,
morphology, *Mascarenes* 4866
- Tylana indecora**,
morphology, *Mascarenes* 4866
- Tylana maneti**,
morphology, *Mascarenes* 4866
- Tylana nigromaculata**,
new species, taxonomy, morphology, *Mascarenes* 4866
- Tylana rodriguensis**,
new species, taxonomy, morphology, *Mascarenes* 4866
- Tylotropidius gracilipes**,
synonymy, taxonomy, *Tylotropidius royi* 780
- Tylotropidius royi**,
synonymy, taxonomy, *Tylotropidius gracilipes* 780
- Tympanum**,
auditory perception, acoustic responses, echolocation, predators, Chiroptera, *Lepidoptera* 4975
auditory perception, neurons, neurophysiology, larvae, *Locusta migratoria* 4970

Lysiphanes, (continued)
development receptors cells, scolopidium, larvae, Locusta migratoria 8218
as auditory perception, mechanical properties, acoustic trachea, Tettigoniidae,
crickets 9733
as auditory perception, mechanical properties, Noctuidae, Acrididae 4976

Lyxotrupa tuberculatum,
records Asia Australia 1582

Lyxotrupa calanina,
records Asia Australia 1582

lyzins,
collections museums Lepidoptera 7921
morphology Maniola turina splendida 8889
morphology Rhagoletis punicea 5583
morphology taxonomy Brachydaea 7215
morphology taxonomy Nalodidae 5734
taxonomy revision nomenclature Eucosmidae 7900
taxonomy morphology Trechus distinguendus 5702
taxonomy museum collections Bombyliidae 6783

lyzophora ferevara,
stereoacoustic acoustical detection traps 3783

lyzophilus australis,
new species taxonomy morphology, Brazil 8838

lyzophilus climax,
new species taxonomy morphology, Brazil 8838

lyzophilus de werneri,
new species 4 new species taxonomy, morphology India 34

lyzophilus thaus,
species comparison herbivores, host plants records, species area relation,
Brazil flies 7903

lyzophilus occidentalis,
damages organisms diethylbenzene effects on pest control Laspeyresia
occidentalis 8063

lyzophilus ruficornis,
morphology Nigeria 1588

lyzophilus pyri,
as citrus pests toxicity Malus 297
as citrus toxicity tests 2064

lyzophilus yankovskyi,
new species, taxonomy, morphology, USSR, Siberia 7106

lyzophylla,
leg sensilla, mechanoreceptors, Periplaneta americana 6980

lyzophyllus lyzophilus,
new records parasites Mallophaga Acarina Hippoboscidae, Canada, Manitoba,
Africa March 514

lyzophyllus verticalis,
new records parasites Mallophaga Acarina Hippoboscidae, Canada, Manitoba,
Africa March 514

lyzophyllus tui,
as sensory morphology, nymph larvae adults 8029

lyzophyllus phidolea,
as sensory importance 655

lyzophyllus palustris,
decay fungi, effects on softwoods, food preferences, Coptoeremus acinaciformis
1190

lyzophyllus longus,
enzymatic activity, lysozyme 1764
stored products, post, chemical control, fumigants 1045

lyzophyllus putrescentiae,
sensory behavior, activity, monotonous, alarm behavior 7339
sensory behavior, chemical composition, (Z)-2-alkenyl formate, alarm behavior
7343

lyzophyllus phoronomus,
allergens, house dust, man 1371
antigenic analysis 2913
infestation, stored products, environmental conditions, relative humidity,
Tritium 8513
pest control, stored products, air flow 6092
seals, buildings, Czechoslovakia, Prague 592

lyzophile,
levels, metamorphosis, Periplaneta americana 9042
neurotransmitter accumulation neurotransmitters hemolymph Bombyx mori 2570
neurotransmitter techniques Aedes aegypti 170
RNA synthesis examination DNA Thripsella melanogaster 2404
in total N methylcarbamate, effects on oxidation, Bombyx mori 7317

lyzophilus antimutatoriferae,
purification, characterization, salivary gland, Drosophila hydei 932

lyzophilus l-mimosugineus,
activity, metamorphosis, Periplaneta americana 9042

lyzophilus phosphatase, phosphatase,
purification, characterization, larvae, Drosophila melanogaster 8085

lyzophilus,
keys, identification, species 2495

lyzophilus,
parasites, new species, new records, Australia 1589

lyzophilus podagrer,
parasites, new species, new records, Australia 1589

lyzophilus sanctus,
parasites, new species, new records, Australia 1589

lys,
radiation,
effects on flight activity, Antheraea pernyi 6702

lys,
effects on chromosome movements, spermatocytes, Nephrotoma ferruginea 4681
effects on movements, orientation, Pica leuca 6232

lysipha local,
infestation, Elasmobranch flavescens 2158

lysipha profundus,
peaks, feeding site preferences, Apium graveolens 8550

lyganda,
abundance, predators, domestic animals excretory products, Arthropoda 2896
African trypanosomiasis, disease control, vectors, Glossina 4495
disease transmission, African trypanosomiasis, environmental factors, Glossina
1347
new records, Deroceras 4781

lyganda,
new species, taxonomy, morphology, Deroceras hancocki 4781
population dynamics, mortality, Aedes africanus 8369
population studies, females, Aedes africanus 1295

lylella dubia,
introduced species, occurrence, Eire 9451

lylax europaeus,
biological control, introduced species, Apion ulicis, Apion scutellare,
Agonopterix ulicetella, New Zealand 5335

lymas,
host plants, preferences, Erosmia 8356
weed management methyl bromide, mortality, Scolytus multistriatus 8491

lymas americana,
Dutch elm disease, biological control, Pseudomonas syringae 4526

lymas parvifolia,
attraction vectors, Scolytus multistriatus 2062

lymas procerus,
attraction vectors, Scolytus multistriatus 2062
host plants breeding sites, pests, Scolytus multistriatus 6195

lymas pumila,
attraction vectors, Scolytus multistriatus 2062

lymoridae,
avoidance behavior, defensive behavior, predators 9117

lymorus ferokius,
ovoviviparous construction, maternal behavior 6672

lymorus republicanus,
avoidance behavior, defensive behavior, predators 9117

lyomyia,
taxonomy, synonymy, nomenclature 7960

lyomyia cognata,
geographical distribution Germany, Fed Rep., Bavaria, Murnauer Moos 4730

lyra structure,
central nervous system cells, Periplaneta americana 3266

lyranstructure,
accessory gland, Drosophila funebris 8118
antennal sensilla, antennal hair, Geophilus longicornis 6528
antennal sensilla, chemoreceptors, chemoreceptors, Hyperba postica 3289
antennal sensilla, chemoreceptors, Scaptomyza postica 6532
antennal sensilla, electrophysiology, Scaptomyza postica 6532
antennal sensilla, function, Agrostis segetum 143
antennal sensilla, larvae, Simuliidae 4135
antennal sensilla, sensilla basiconica, Geophilus longicornis 7305
antennal sensilla, sex differences, Anopheles tenebrosus 8071
brain cells, neurosecretion, pupae, Bombyx mori 991
cells, hemolymph, hemopoietic system, Drosophila melanogaster 6517
central nervous system, blood-brain barrier, Scaphomyza 902
chemoreceptors, antennal sensilla, Callibaetis vicina 6529
chemoreceptors, head hair, Locusta migratoria 6531
chemoreceptors, sensilla, Aerenchyma maritima 1287
chorion eggs, Tenobrydes mauritanicus 6489
compound eyes, comparative studies, Cecropia, Cephenodes, Macroglossus 726
cornea, compound eyes, Apis mellifera 144
cyst organs, epiblastum, Geophilus longicornis 6543
cytology accessory gland, Drosophila funebris 8118
cytology salivary gland, host-parasite interactions, Rhipicephalus
appendiculatus Theileria parva 256
development, connective tissue, brain, central nervous system, Galena
melionella 125
development, defective mutants, Drosophila melanogaster 765
development, ovaries, Hyalomma 5396
digestive tract cells, endocrine system, Lepidoptera 924
digestive tract, Terranychus urticae 2546
ear, Hemiderma crassidens 138
egg shells, embryogenesis, Drosophila melanogaster 3510
eggs, Bacillus anthracis capni 4387
eggs, population studies, Clonostylops gallica 6634
eggs, surface properties, Ascaris suum 5894
eggs, water balance, Ascaris suum obiectus 2499
embryo cells, cell culture, Bosphorus microps 875
embryonic glands, germ cells, Terrestrialispora bifasciens 7428
endocrine glands, role vitellogenesis, Bosphorus microps 989
enzyme activities, bioluminescence cells Photorhabdus 995
enzyme activity, digestive tract, Rhyacionia americana 2543
epithelium excretory glands, Therapsida domestica 1386
excretory systems, body organs, Peripatus ascanii 4151
exocrine glands, Dermatanecton variabilis 2614
exocrine glands, waxes, Eucosmidae lagerstraeae 990
eye, dark culture effects on, Drosophila melanogaster 131
eye, homologues, Hydrophilus ruber 56
fat body, molting, Hypogastrura ulbergi 4281
fat body, sexual dimorphism, Isopoda 3161
flagella, symbiosis, bacteria, Isopoda, Pseudoscorpion 5172
frontal bodies, role, water balance, semi-arid environments, Arenivaga investigata
977
functional morphology, malpighian tubules, Pyrops candelana 163
gametes, Pinella aptera 9037
giant nephrocytes, fat body, Bombyx mori 3267
gills, larvae, Euphaedra 6538
glands, prosomal glands, Terranychus urticae 3269
glands, waxes, secretion, integument, larvae, cysts, adults, cytology,
Porphyrinophora, Sphaeropsis, Eurhizococcus 243.
gnathosome, Psoroptes 6497
gut, malpighian tubules, antibiotics, nikkomycin, effects on osmoregulation,
Epilachna varvestris 4175
heart muscles, cell membranes, Lithobius forficatus 6541
hemolymph, blood cells, Drosophila melanogaster 2542
hemolymph effects on, immunity, Pseudomonas aeruginosa, Galleria mellonella 8
hepatopancreas, diets effects on, Armadillidium vulgare, Porcellio scaber 6589
hindgut epithelium, Notonecta glauca 3310
imaginal discs, patterns regulation, Drosophila melanogaster 341
integument, secretions, Zygaena 6595
larvae, baculovirus infection effects on, Pandemis heparana 1825
larvae heads, capsules, Chironomidae 104
leg muscles, Paruroctonus mesasiatica 119
lipid composition, cuticle, Latrodectus hesperus 3273
malpighian tubules, segments, comparison, Blattella germanica, Tenobrydes molybdus
119

Ultrastructure, (continued)

- 6548
maxillary palps, sensilla, *Toxorhynchites brevipalpis* 4137.
mechanoreceptors, neurons, *Pteris rapae* 903
mechanoreceptors, *Periplaneta americana* 145
microtubules, epithelium, *Thysanura* 4117
midgut, embryogenesis, *Citotinus extradentatus* 4247
midgut endocrine system cells, *Blattaria* 101.
morphology, *Spiluriscidae* 7279
mouth parts, parasites, *Arrenurus* 2505
muscles, *Locusta* 6523
neuromuscular junctions, *Acrididae* 4121.
neuromuscular junctions, synapse, *Lepidoptera* 4116.
neurons.
nuclei, muscles, development, *Bombyx* mon 7281.
ommatidia, visual perception, light, polarization, *Calliphora erythrocephala* 4967
oocytes, diapause, *Cordulia aenea* 2680
oocytes, juvenile hormones analogs effects on, *Drosophila melanogaster* 1858
organs, neurosecretion, abdomen, *Rhodnius prolixus* 251
ovary, cytoplasmic transport, *Coccinella*, *Tenebrio* 1077
pathogens, electron microscopy (scanning), *Baculovirus*, cytoplasmic polyhedrosis virus, *Entomophaga*, *Insecta* 8143
pathogens, infection, *Barnoussia schneideri*, *Lithobius forficatus* 5754
pathogens, infection, *Nomuraea rileyi*, *Anticarsia gemmatilis* 4208
perineurium, cells: cytology, tracers, *lanthanum*: permeability, nervous system, *Musca domestica* 882
peripheral nerves, nerve 3B, strand receptors, trochanter, coxa, *Orthoptera* 8067.
peritrophic membranes synthesis, development, electron microscopy (scanning), *Trichoplusia* ni 340.
phages, isolation, *Apis mellifera*, *Bacillus* larvae 8138.
photoreceptors, diurnal variations, *Acrididae* 147
photoreceptors, rhodomer, spatial distribution, eye, *Musca domestica* 4968
reproductive organs, role, sex determination, *Diadromus pulchellus* 3504
reproductive organs, semen receptors, *Glossina morsitans morsitans* 3455
scents, scales, *Lepidoptera* 7268
secretion cells, mandibular glands, workers, *Apis mellifera* 4951
segments membranes, cuticle, *Locusta migratoria migratorides* 3271
seminal fluid receptacles, molting transformation, *Thermobia domestica* 1076
Seminiferous tubule, *Lepidoptera* microphthalmia 329
sense organs, antennae, *Polytenus lagurus* 4140
sense organs, taste perception, mouthparts, *Drosophila melanogaster* 133
sensilla, chemoreceptors, *Macrosteles fascifrons* 4362
sensilla, maxillary palps, *Gryllus bimaculatus* 3294
sensilla, mechanoreceptors, mouthparts, females, *Simulium venustum* 4142
sensilla, tarsi, *Chironomus* 6535
sex pheromone receptors, *Musca domestica*, *Glossina morsitans* 974
spermatophores, *Glossina morsitans* 325
spermatozoa, locomotion, *Aedes notoscriptus* 105.
sporogony, parasites, salivary gland, *Theileria parva*, *Rhipicephalus appendiculatus* 9007.
temperature perception receptors, antennal sensilla, *Periplaneta americana* 146.
temperature receptors, *Rhipicephalus appendiculatus* 275
transport epithelium, tubus ventralis, *Tetradonophora bialensis* 4947.
trifoliate organ, taxonomy, *Atherigona* 4105.
tumor cells, heteroplastic system, hemolymph, mutants, *Drosophila melanogaster* 6516.
ventral gland, development, embryogenesis, *Carausius* 6596.
vitellogenesis, histochemistry, *Ata* 5066.
- Ultraviolet radiation,**
effects on chromosomes movements, *Spermatocytes*, *Nephrotoma ferruginea* 4683
effects on pathogenicity, *Bacillus thuringiensis*, *Spodoptera littoralis* 1011
effects on polyacetylenes, toxicity, *Aedes aegypti*, *Simulium vittatum* 2959.
effects on survival, cells, defective mutant, *Drosophila melanogaster* 3902.
effects on toxicity, polyacetylenes, *Aedes aegypti* 317.
sensitivity, compound eyes, light traps, *Spodoptera exigua*, *Spodoptera frugiperda* 9119.
- Umbelliferae,**
chemical composition, furanocoumarins, xanthotoxin, growth, *Papilio polyzenes* 5968
furanocoumarins, phototoxicity, herbivores, *Oecophoridae*, *Papilionidae*, USA, New York 2079
host plants, abundance effects on species diversity, *Agromyridae* 6789
host plants, host range, historical account, *Psila rosae* 8341
- Umbilicola,**
new genera, taxonomy, morphology, New Guinea, *Umbi* 1. 4852
- Umbilicola antennata,**
new species, taxonomy, morphology, New Guinea, *Umbi* 1. 4852
- Unapis euonymi,**
carbofuran effects on females fecundity 2651.
- Unconditioned response**
olfactory stimuli, amines effects on, brain, *Apis mellifera* 6687
- Z-5-Udecenyl acetate,**
sex pheromone, pest control, efficacy, *Euxoa ochrogaster* 742
- Unguisula,**
parasitism effects on, *Ixodidae*, Zimbabwe 633.
- Umbilicola crassipes,**
feeding behavior, ecological distribution, Netherlands, Maarsseveen T L. 5433
- Umbilicola formosa,**
hosts, parasites phototaxis, *Anodonta imbecilis* 5191
- Uxialis,**
taxonomy, morphology, geographical distribution 6371.
- Upper Volta,**
disease transmission, control programs, African trypanosomiasis, decemethrin, male sterility, *Glossina* 1345
pests, biology, behavior, *Saccharum officinale*, *Eldana saccharina* 2098.
population dynamics, seasonal variations, host plants, *Atherigona* 4431.
- Uranotaenia,**
breeding sites, surveys, septic tanks, Malaysia 9261
- Urban environment,**
biological control, parasitoids, *Rhopalomyia californica*, USA, California 4572
ectoparasites pests, population regulation, *Aphis nerii*, *Nerium oleander*, USA, California 1276.
habitat preferences, nesting, walls, *Megachilidae*, British Isles 1182.
vectors, salmonellosis, man, *Insecta* 6885.

Urban environment, (continued)

- vegetables crop fields, biological control, *Pediobius foveolatus*, *Epilachna varivestis* 2032.
wood damage, feeding behavior, *Coptotermes kishori*, India 1405.
- Urban environments,**
census methodology, *Blattidae* 8858.
ecological distribution, habitat, *Hyalophora cecropia*, USA, Illinois 7597.
environment management, horticulture, pest control, *Insecta* 3727.
pests movements, buildings, *Blattella germanica* 8436.
population establishment, abundance, *Vespaula germanica*, *Vespaula maculifrons*, USA, New Jersey 9200
spatial distribution, houses, *Blattella germanica*, USA, Virginia 3645.
- Urbanus proteus,**
migrations, weather, synoptic-scale wind systems, USA, Florida 5978.
pest control, *Phaeosolus vulgaris* 709.
- Urea,**
Bay SIR-8514, growth regulators, pest control, *Tanytarsus*, *Chironomus*, *Procladius* 4601.
growth regulators, pest control, golf courses ponds, *Tanytarsus*, *Chironomus*, *Procladius* 8546.
gustatory stimuli, food preferences, *Camponotus compressus* 8301.
- Urena lobata,**
food plants, growth, food conversion, *Spodoptera littoralis*, Ghana 2849.
- Uric acid,**
excretory products, comparative studies, *Blattodea* 928.
recycling, symbiosis, gut bacteria, *Reti culitermes flavipes* 3574.
- Uroacanthia,**
infestation, mortality, *Lampropholis delicata* 2885.
- Urocetus gigas,**
oviposition, substrate specificity, environmental effects, host plants, Australia 1896.
- Urochloa setigera,**
diets, effects on development, mortality, *Acrotylus insubricus* 2693.
- Urocyon cinereoargenteus,**
wildlife, parasites, *Sarcoptes scabiei*, USA, Pennsylvania 5193.
- Uroleleoon,**
host plants, geographical distribution, reviews 6808
- Uroleucon caligatum,**
herbivores, development variation, host-parasite interactions, *Solidago* 5963.
- Uromycladum tepperianum,**
galls, species composition, *Lepidoptera*, *Acacia* host plants 7557.
- Urospila carvel carvel,**
emergence, age composition, larvae, New Zealand, Wellington 9085.
- Urophora cardui,**
biological control, weed control, galls, *Cirsium arvense*, Canada 3805.
emergence, galls, host plants, *Cirsium arvense* 8354.
- Uroplata,**
taxonomy, morphology, geographical distribution 2401.
- Uropodidae,**
community composition, forests, leaf litter, Romania 6006.
- Urosigalphus,**
keys, morphology, Mexico 5599.
taxonomy, morphology, keys 5594.
- Urosigalphus alius,**
new species, taxonomy, morphology 5594.
- Urosigalphus diversus,**
new species, taxonomy, morphology 5594.
- Urosigalphus flexus,**
new species, taxonomy, morphology 5594.
- Urosigalphus meridianus,**
new species, taxonomy, morphology, Mexico 5599.
- Urosigalphus porteri,**
new species, taxonomy, morphology 5594.
- Urosigalphus surinamensis,**
new species, taxonomy, morphology 5594
- Urosigalphus yucatanensis,**
new species, taxonomy, morphology, Mexico 5599.
- Uroxyx gorgon,**
dung utilization, forests, Panama 8370.
- Ursus americanus,**
pests, apiculture, economics, USA, Florida 6090.
predation, beehives, apiculture, *Apis mellifera*, USA, North Carolina 5379.
predation, hives, apiculture, *Apis mellifera* 3040.
- Urticaria,**
allergens, Dermatophagoides pteronyssinus, Dermatophagoides farinae 3684.
- Urbambates romanicus,**
taxonomy, new species, morphology 3.
- Uruguay, Parque R.,**
larvae, morphology, *Aeshna bonariensis* 865.
- USA,**
bibliographies, pests, *Solenopsis invicta*, *Solenopsis richteri* 7929.
bibliographies, *Xylosandrus germanus* 7130.
biological control, aquatic weeds, host specificity, *Hydrilla verticillata*, *Paraponyx rugosalis* 2204.
biotypes, mathematical models, development, emergence, *Heliothis zea* 2695
case reports, infestation, *Linognathus setosus*, *Canis familiaris* 2909.
check lists, predators, *Hypera postica* 3736.
collections, directories, federal policy, public lands, *Arthropoda* 4754
Colorado tick fever, epidemiology, vectors, *Dermacentor andersoni* 637
control programs, eradication, *Cochliomyia hominivorax* 1459.
crop fields, pests infestation, *Mayetiola destructor*, *Triticum* 2191.
economic importance, pests, effects on cattle, reservoirs, *Haematobia irritans* urians 5279
geographical distribution, introduced species, morphology, *Poecilopygus formicophilus* 6333
geographical distribution, life history, seasonal variations, occurrence, *Slaterocoris pallipes* 2776.
geographical distribution, range extension, *Aleuropteryx juniperi* 3944
geographical distribution strains, growth, development, *Simulium decorum* 2793
government regulation, chemical control, toxicity, pesticides 7922.
infestation, population dynamics, emergence, galleries construction, mathematical models, *Dendroctonus frontalis* 3643.
insecticides, efficacy, geographical variations, seasonal variations, *Lissorhoptrus oryzophilus* 3013
keys, morphology, synonymy 3651.
new records, geographical distribution, *Andrena haynesi* 5527

Subject Index

USA, (continued)

- new records, geographical distribution, *Anthidium toletum* 7115.
new records, geographical distribution, ecological distribution, *Minixi mexicanum* 2368.
new records, geographical distribution, *Euryurus maculatus*, *Euryurus cingulatus*, *Euryurus leachi fraterum* 4911.
new records, geographical distribution, *Rhinoceros* 790.
new species, morphology, new records, geographical distribution, *Hilipinus nearticus* 4811.
new species, taxonomy, morphology, *Anomalohalacarus litoralis* 7147.
new species, taxonomy, morphology, *Cixius* 6426.
new species, taxonomy, morphology, *Ecotopra lechi* 4788.
new species, taxonomy, morphology, geographical distribution, *Oxyethira dunbartonensis*, *Oxyethira sinuigera*, *Oxyethira leonensis* 850.
new species, taxonomy, morphology, *Prokelisia dolus*, *Prokelisia carolae* 8813.
new species, *Tricorynus dudleyae*, *Tricorynus fuliginosus*, *Byrrhodes ovatus* 2400.
pasture, dung, recycling, economic importance, introduced species, *Geotrupes* 4654.
pest control, apiculture, killer bees, *Apis mellifera adansonii* 4636.
pest control, pheromone traps, research programs, *Agrotis ipsilon* 8574.
pest control, research programs, U.S. Department of Agriculture, evaluation methodology 7923.
pest outbreaks, infestation, population dynamics, mathematical models, *Dendroctonus frontalis* 3644.
pest outbreaks, new records, pest control, *Trogoderma granarium* 3768.
pest outbreaks, parasites, cattle, *Psoroptes* 5281.
pests, effects on silviculture, economic importance, models, *Pinus resinosa*, *Neodiprion lecontei* 5413.
pests, ornamental plants, dispersal, *Hyadaphis tatarica*, *Lonicera* 7793.
phenotypes, morphology, occurrence, *Cobias cesonia* 7269.
population dynamics, competition, extinction, land use effects on, *Pieris oleracea*, *Pieris rapae* 1286.
taxonomy, morphology, *Eremobates* 1595.
USA, Alabama,
life history, habitat, new records, *Spanglogyrus albiventris* 5139.
new records, life cycle, *Eriocampa juglandis* 9099.
USA, Alaska,
apiculture, methodology, economic analysis, environmental factors 1409.
check lists, records, range extension, geographical distribution, *Plecoptera* 7019.
ectoparasites, new records, birds, *Arthropoda* 520.
life cycle, ponds, tundra, *Chironomus* 5149.
new records, hosts, parasites, *Halimelachne halichoeri*, *Phoca largha* 4385.
new species, taxonomy, morphology, *Lipilipio yukon* 5551.
new species, taxonomy, morphology, *Protura* 4062.
parasites, new records, check lists, range extension, *Siphonaptera*, *Mammalia* 5530.
tundra, leaf litter decomposition, nutrient cycles, soil fauna, *Arthropoda* 5989.
USA, Alaska, Alaska,
interspecific relationships, pollination, dispersal, *Pedicularis*, *Bombus* 4404.
USA, Appalachian Mts.,
clear cutting effects on community composition, forests, *Araneae* 6042.
USA, Arizona,
community composition, environmental impact, power lines, chaparral, *Arthropoda* 9183.
enzyme polymorphism, heterozygosity, genotypes, distribution, *Anthonomus grandis* 2339.
foraging behavior, predator-prey interactions, prey spatial distribution, diel variations, *Parulidae* 4421.
forests, community structure, succession, *Arthropoda* 6854.
new genera, taxonomy, *Hulechius* 4784.
new species, morphology, taxonomy, *Alienates barben* 2433.
new species, taxonomy, morphology, *Agabus apache* 4799.
new species, taxonomy, morphology, *Prionus linsleyi* 7957.
new species, taxonomy, morphology, *Succella gillispayi* 8827.
outbreaks, population density, species diversity, outbreaks, vegetation patterns, *Ancididae* 6050.
pest outbreaks, host plants, *Atriplex canescens*, *Tridax nova* 6795.
pests, environmental management, control programs, *Insecta* 1434.
population studies, overwintering, emergence, temperature effects, *Heliothis virescens* 1862.
prey activity patterns, predator-prey interactions, *Insecta*, *Parulidae* 4421.
pupae, eggs, spatial distribution, trees, *Colorado pandora* 6035.
species composition, abundance, crop fields, weeds, *Lygus* 4604.
USA, Arizona, Dry Creek,
streams, pools habitat, coexistence, *Dytiscidae*, *Culicidae* 9372.
USA, Arizona, Santa Cruz Co.,
sympatric populations, phenotypes, taxonomy, morphology, *Apodemus mormo* 6878.
USA, Arizona, Sulphur Springs Valley,
burrowing behavior, defense mechanisms, prey attraction, *Cicindela willistonii* 5888.
USA, Arizona, Sycamore Creek,
floods, recolonization, *Insecta* 5432.
USA, Arizona, Sycamore Creek,
fauna, environmental surveys, community composition, *Insecta* 3870.
USA, Arkansas,
pests, surveys, *Arthropoda*, *Vaccinium corymbosum* 4551.
population studies, geographical distribution, *Aedes aegypti* 640.
USA, California,
abundance, recruitment, herbivores effects on, *Haplappapus squarrosus*, *Insecta* 6783.
age composition, environmental degradation, recovery, water springs, *Gumaga nigula* 7812.
aggregation, feces pheromones, sympatric populations, *Tipula acuta*, *Tipula simplex* 6721.
agricultural practices, pollination, *Apis mellifera*, *Medicago sativa* 2941.
biological control, natural enemies, parasites, predators, *Pseudococcus comstocki* 3018.
chemical control, malathion, *Ceratitis capitata* 713.
damage, crop fields, *Bemisia tabaci*, *Trialeurodes abutilonea*, *Aleyrodes spiraecoides* 9290.
disease transmission, vectors, *Dirofilaria immitis*, *Aedes vexans*, *Aedes sierrensis* 4494.
drought effects on parasitism, *Insecta*, *Coniferales* 4394.
ectoparasites pests, population regulation, urban environment, *Aphis nerii*, *Nerium oleander* 1276.

USA, California, (continued)

- ectoparasites, surveys, *Tetranychidae*, *Prunus amygdalus* 1391.
fires, recovery, chaparral, succession, community composition, *Insecta* 5246.
habitat, phenology, behavior, *Apocera exata*, *Apocera hyda*, *Apocera haruspex amfasciata*, *Apocera pearcei*, *Rhaphidomada atkeni* 9087.
host plants, flowers, feeding, *Streptanthus*, *Pteris* 8340.
infection, mortality, *Neckersia-like* organisms, *Tricophilus* n. 5731.
infestation, case reports, ophthalmomyiasis, *Oestrus ovis* 7644.
insecticides effects on non-target organisms, community composition, *Arthropoda* 2149.
life history, *Caroliella beeverana* 6722.
life history, oviposition, flight activity, *Euprosperum eutepe* 7511.
males, aggregation behavior, territorial behavior, *Cuterebra leporina* 582.
marine environment, interspecific relationships, algae, *Diptera* 3858.
new genera, new species, taxonomy, morphology, *Orobanchaceae obscura* 6450.
new species, taxonomy, morphology, *Bembus obscurus* 6431.
new species, taxonomy, morphology, *Cosmopterix panochensis* 6384.
new species, taxonomy, morphology, *Gretchena obsoletus* 7993.
new species, taxonomy, morphology, *Stenella villegasi* 8827.
new species, taxonomy, morphology, *Tetrastichus cecidobroter* 7963.
new subspecies, taxonomy, morphology, food plants, *Glovenia medusa editha* 7226.
new subspecies, taxonomy, morphology, *Papilio indra phyllisae*, *Papilio indra panamintensis* 7223.
nuclear polyhedrosis-virus transmission, survival, *Orygia pseudotsugae* 280.
nymphs, development, feeding, host plants, *Nicotiana glauca*, *Corneliana extensa* 8290.
occurrence, population dynamics, sampling methods, crop fields, *Myzus persicae*.
Brevicoryne brassicae, *Hyadaphis erysimi*, *Macrosiphum euphorbiae* 9349.
ornamental plants, pest control, natural enemies, *Pulvinella mesembryan* themu, *Pulvinaria deltois* 9316.
overwintering aggregation, energetics, metabolism, *Danaus plexipus* 6844.
parasites, new records, geographical distribution, *Dendroster protuberans* 7121.
pest control, biological control, natural enemies, *Spodoptera praefica* 4626.
pest control, chemical control, *Lepidoptera*, *Apium graveolens* 9343.
pest control, environment management, *Insecta* 3725.
pest control, integrated control, life cycle, host plants, *Rhyacionia frustrana* 5318.
pest control, orchards, *Prunus amygdalus*, *Tetramorium caespitum*, *Solenopsis xyloni* 6907.
pest control, parasitoids, population dynamics, *Rhopaia californica* 4572.
pest control, pest outbreaks, review, *I. mantrita dispar* 6905.
pest outbreaks, fruit trees, *Ceratitis capitata* 3014.
pests, birds, man, *Caprimulgus*, *Phaenocarpa*, *Phaenocarpa* 6160.
pests, dispersal, larvae, eggs, *Pulvinella mesembryan* themu 2165.
pests, infestation, control, *Ceratitis capitata* 1442.
pests, landing behavior, host plants, *Ips plastographus maritimus*, *Pinus radiata* 3739.
pollinators, population establishment, *Osmia lignaria propinqua* 9286.
population dynamics, life history, comparison, biotype, *Simulium* 3866.
population-environment relations, habitat, phenology, bionomics, *Culiceta inornata* 9221.
providing sexual reproduction, *Apis mellifera* 323.
Rocky Mountain spotted fever, *Rickettsia*, vectors, hosts, *Mammalia*, *Acarina* 1321.
sex ratio, population genetics, annual variations, abundance, *Drosophila pseudobscura* 6279.
systematics, parapatric populations, geographical variations, morphology, *Lycena sabbodes* 7123.
taxonomy, synonymy, fossils, Pleistocene epoch, *Scarabaeidae* 2404.
vectors, disease transmission, *Canis familiaris*, *Dirofilaria immitis*, *Aedes sierrensis* 8073.
weeds toxicity, herbivores, *Conium maculatum*, *Hyadaphis foeniculi*, *Euscelidius variator*, *Papilio zelicaon* 8353.
wildlife conservation, role, education, *Lycena heterocera clara* 2112.
USA, California, Catalina I.,
endangered species, ecological distribution, abundance, *Anthocharis cethura catalina* 2105.
USA, California, Death Valley,
migrations, desert, populations, genetics, *Drosophila* 6814.
USA, California, Imperial Valley,
historical account, infestation, pests, damage, *Pectinophora gossypiella* 8558.
USA, California, Lagunita L.,
rare species, geographical distribution, abundance, *Apterallus parvulus* 2288.
USA, California, Mendocino Co.,
life history, sexual reproduction, blood meals, *Chrysops hirsuticulus* 5146.
USA, California, Mount Eddy,
ecology, biogeography, species composition, *Lepidoptera* 7122.
USA, California, Orange Co.,
pests, spatial distribution, host plants, *Brevicoryne brassicae*, *Myzus persicae* 8358.
USA, California, Placer Co.,
new species, taxonomy, morphology, *Rhyacophila* 6461.
USA, California, Sageshen Creek,
life history, feeding behavior, migrations, nymphs, *Desmonea bethula* 3868.
USA, California, San Bernardino Mts.,
new species, taxonomy, morphology, *Colorado veldi* 6447.
USA, California, San Diego Co.,
infestation, host plants, *Artemisia californica*, *Peranthus vittatus* 6810.
USA, California, San Geronimo Mts.,
records, occurrence, geographical distribution, aquatic environment, *Simulium defoliaria*, *Prosimulium onychodactylum* 1572.
USA, California, Santa Cruz I.,
surveys, check lists, *Rhaplocera* 7118.
USA, California, Trinity Alps,
ecology, biogeography, species composition, *Lepidoptera* 7122.
USA, Colorado,
abundance, association, *Formica neoclara*, *Aphis fabae* 6863.
community structure, competition, niche partitioning, *Bombus* 4469.
cuticles, chemical composition, organic compounds, *Hymenoptera* 107.
fossils, Oligocene epoch, *Insecta* 3168.
morphology, teratogenesis, *Thrasia* fossil 3263.
mortality, infestation, *Insecta*, *Coniferales* 7551.
new records, range extension, streams, *Taenoperyx* 3165.
new species, taxonomy, morphology, *Eutonia inscripta* 8839.
population studies, hybrids, morphology, *Scaphandria* 7063.
seasonal variations, diel activity, flight activity, *Culicoides varipennis*, *Culicoides crepuscularis*, *Culicoides heriophycus*, *Culicoides palmeriae* 442.

- USA, Colorado, (continued)**
surveys, flight activity, night. Lepidoptera 2791.
trophic status, food preferences, *Zapada oregonensis*, *Zapada cinctipes*, *Capnia confusa* 3855.
- USA, Columbia R.,**
phototaxis, dispersal, larvae, *Hydropsyche cockerelli* 5435
- USA, Connecticut,**
abundance, distribution, *Meligetha septendecim* 8376
Malus orchards, pest outbreaks, leaves damage, *Phyllonorycter crataegella* 3024
new records, geographical distribution, habitat, *Asaphidion flavipes* 8696
parasite transmission, epidemiology, *Babesia lotoni*, *Procyon lotor*, *Ixodes texanus* 1004
parasitism, annual variations, orchards, *Phyllonorycter crataegella* 5943
parasitism, pupae, *Rhagoletis pomonella* 2819
pest control, parasitoids, *Brachymeria lasus*, *Coccygomphus disparis*, *Lymantria dispar* 8466
pollination, food sources, *Thurs occidentalis*, *Apis mellifera* 4400
population status, parasites, *Ostrinia nubilalis*, *Eirborus terebrans*, *Macroctonus grandis*, *Aploma caesar*, *Lixophaga* 8399.
- USA, Delaware,**
bionomics, life cycle, phenology, *telamona monticola* 9112
parasites occurrence, biological control, *Lydella thompsoni*, *Ostrinia nubilalis* 3033
- USA, East,**
feeding behavior, carrion, forests, *Formicoida* 4361
geographical variations, latitude, diapause, *Aedes triseriatus* 8222
life cycle, parasitoids, host plants, *Hamamelis virginiana*, *Pseudanthrenus ham* 9097
new records, geographical distribution, *Coelioxys bisoncornis* 9494.
- USA, East Coast,**
range extension, host plants, host-parasite interactions, *Catorhintha mendica*, *Mirabilis nyctaginea* 4397.
- USA, Florida,**
abundance, ecological distribution, polymorphism, salt marshes, *Delphacidae* 6833.
abundance, species composition, lakes, reservoirs, *Chironomidae* 8609
apiculture, pests, economics, *Uros americanus* 6090.
biological control, parasites, dispersal, *Amitus hesperidum*, *Encarsia opulenta*, *Aleurocanthus woglumi* 4544
case reports, infestation, *Lynxacarus radovskyi*, *Felis domestica* 2922.
citrus blight vectors, distribution, *Cicadellidae* 6174.
citrus groves, pests, infestation, life cycle, *Araceus fasciculatus* 8565.
crop protection, pest control, pathogens, *Phyllocoptruta oleivora*, *Hirsutiella thompsoni* 4548.
emergence periodicity, diel activity, light effects, *Chironomidae* 152.
geographical distribution, *Podagrionina* 1654
geographical distribution, range extension, *Halysidota harrisii* 5533.
habitat preferences, phenology, *Castaneira crocata*, *Castaneira floridana* 1963.
infestation, damage, *Pinus clausa*, *Systema marginalis* 5168.
intestinal parasites, hosts, *Arthropoda*, *Zenaidura macroura*, *Zenaidura asiatica* 3582.
irrigation flooding, effects on, habitat utilization, *Aedes vexans* 1389.
larvae, morphology, keys, *Myrmecole* 1709.
malana transmission, *Plasmodium hermani*, *Culicidae* 1320.
mangrove swamps, abundance, seasonal variations, *Culicoides* 4419
mating, overwintering, spermatozoa storage, *Scaptomyza aeneus* 5148.
migrations, wetland, synoptic-scale wind systems, *Phoebastria senae*, *Urbanus proteus*, *Agraulis vanillae*, *Proctos coenia* 5978.
morphology, bionomics, larvae, *Nectopsyche tavara* 6481
nesting behavior, predation, *Pomphidae* 1948
new records, cleptoparasitism, *Araneae*, *Coleomyiidae* 1995.
new records, geographical distribution, *Mydus* 5534
new records, geographical distribution, *Oxytelus* 2371.
new species, *Dichorompha sapodilla*, *Dichorompha manilara* 1660.
new species, morphology, taxonomy, *Macdonnatus brunnea* 3207
new species, morphology, taxonomy, *Neomachilota spiraea* 2464.
new species, taxonomy, morphology, *Cydia largo* 7224.
new species, taxonomy, morphology, *Desmopachria leechi* 4791.
new species, taxonomy, morphology, *Pseudochorutes quadristosus* 1618.
new species, taxonomy, morphology, *Sinuthus incognitus* 4821
new species, taxonomy, morphology, *Solenopsis carolinensis* 4817
new species, taxonomy, morphology, *Sitona fasciata* 8827.
parasites, abundance, *Mallophaga*, *Acarina*, *Phalacrocorax auritus* 5948
parasites, eggs, salt marshes, *Macroteleia surfacei*, *Orchelimum fidicinum* 5187
parasites, infestation, *Pymotes tritici*, *Araceus fasciculatus* 5188
pest control, biological control, chemical control, *Diatraea saccharalis* 3777.
pest control, biological control, parasites, population levels, *Aleurocanthus woglumi* 2946.
pest control, pesticide applications, aerial applications, *Phyllocoptruta demoleus* 3747.
pest control, surfactants, *Aedes taeniorhynchus* 674.
pest outbreaks, biological control, parasites, *Aleurocanthus woglumi* 1420.
pest outbreaks, control, *Ceratus capitata* 3745.
pest outbreaks, seasonal variations, *Citrus sinensis* fruit trees, *Araceus fasciculatus* 4541.
pest outbreaks, seasonal variations, damage, host plants, *Citrus. Araceus fasciculatus* 4613.
pests, parasitoids, host preferences, *Noctuidae* 4374.
pests, species composition, *Manihot esculenta* crop fields, *Insecta*, *Acari* 4555.
salt marshes, abundance, *Hemiptera*, *Homoptera* 5241.
spacecraft, exhausts, effects on indigenous species, *Insecta* 6692.
species composition, distribution, seasonal variations, streams, *Trichoptera* 7018.
surveys, fauna, salt marshes, *Coleoptera* 3622.
Taxodum pests, life cycle, feeding behavior, overwintering, *Dioryctria pygmaeella* 3560.
weed control, biological control, *Sameodes albiguttalis*, *Eichhornia crassipes* 692.
- USA, Florida Coast,**
islands, salt marshes, biogeography, *Arthropoda* 5264.
- USA, Florida, Dade County,**
host-parasite interactions, larvae, *Euplectrus putteri*, *Anticarsia gemmatilis* 508.
- USA, Florida, Indian River Co.,**
ponds, wastewater treatment, species composition, *Culicidae* 6045
- USA, Florida, Oyster Bay,**
feeding, parasitoids, *Hydrellia valida* 3621.
parasitoids, developmental stages, salt marshes, *Prokelisia marginata* 4368
- USA, Georgia,**
forest floor litter, nutrients, decomposition, *Arthropoda* 2114.
islands lakes, abundance, seasonal variations, *Crangonyx gracilis*, *Paspalum fluitans* 2293.
land use effects on apiculture production 6179.
new records, geographical distribution, *Oxytelus pennsylvanicus* 2371.
new species, *Mezura smithi* 8810
new species, morphology, taxonomy, *Frankliniella georgiensis* 3233.
parasites, host searching behavior, dispersal, *Trichogramma pretiosum* 2023.
parasites, *Physocephalus sexualus*, *Ascarops strongylina*, *Gongylonema pulchrum*, *Onthophagus gazella* 9203
pathogens, occurrence, seasonal variations, *Erynia phytonoma*, *Hypera postica* 8154
secondary production, food consumption, environmental factors, *Parapsyche cardis*, *Diplectrona modesta* 2291.
Sorghum vulgare crop fields, pests, pathogens incidence, *Spodoptera frugiperda*, *Heliothis zea* 3407.
- USA, Georgia, Ft. Stewart,**
bites, stings, medical importance, man, *Arthropoda* 6886.
- USA, Georgia, Glynn Co.,**
control programs, vectors, disease transmission, habitat alterations, salt marshes, *Culicidae* 1437.
- USA, Gulf Coast,**
pests, wind dispersal, *Homoeosoma electellum*, Canada, Saskatchewan 2100.
- USA, Hawaii,**
birds parasites, geographical distribution, taxonomy, *Ereynidae* 795.
caves, water loss, cuticular permeability, metabolism, *Lyosoma howarthi* 2607.
evolution, geographical distribution, population genetics, *Drosophila* 5502.
heterozygosity, enzymes polymorphism, parthenogenesis, *Drosophila mercatorum* 3116.
host plants, damage, *Metrosideros collina* polymorpha, *Insecta* 5202.
new species, taxonomy, morphology, hosts, terminology, *Trichogramma* 4021.
pests, infestation, fruit trees, *Carica papaya*, *Dacus dorsalis* 4616.
Plagithymus bilineatus, life history, ecology, oviposition, host selection, stress, *Metrosideros collina* polymorpha 1961.
weed control, natural enemies, *Heliconidae*, *Passiflora mollissima* 2947.
- USA, Idaho,**
defoliation, community structure, *Coniferales* stands, *Orygia pseudotsugata* 3601.
foraging behavior, resource partitioning, colonies, *Pogonomyx owyheei* 5915.
life history, bionomics, streams, *Arctopsyche grandis* 5434.
pest outbreaks, *Choristoneura occidentalis*, *Dioryctria reniculoides*, *Zeiraphera hesperiana*, *Nematocampa filamentaria*, *Griselda radicana*, *Acleris gloverana* 9305.
pest outbreaks, species composition, *Choristoneura occidentalis*, *Dioryctria reniculoides*, *Zeiraphera hesperiana*, *Nematocampa filamentaria*, *Griselda radicana*, *Acleris gloverana* 5889.
population structure, sex ratio, annual variations, *Osmia lignaria* 6871.
- USA, Idaho, Salmon R.,**
population status, occurrence, *Cicindela columbica* 7120.
- USA, Illinois,**
case reports, infestation, *Pneumonyssoides caninum*, *Canis familiaris* 7641.
ecological distribution, habitat, urban environments, *Hyalophora cecropia* 7597.
host plants, defoliation, pests, *Datania integerrima*, *Juglans nigra* 7725.
life history, rearing, morphology, immature stages, *Schirus cinctus* cinctus 8292.
new records, geographical distribution, *Trepelops mesillae* 5535.
new records, reproduction, *Nomia triangulifera* 9497.
occurrence, new records, *Nomia triangulifera* 5528.
range extension, new records, geographical distribution, *Coelioxys bisoncornis* 6327.
rare species, records, occurrence, *Xeromelecia interrupta* 6328.
soil fauna, ecological distribution, population density, overwintering, *Thysanopora* 9367
species diversity, abundance, *Papilionidea* 1952.
- USA, Illinois, Henderson Co.,**
new records, geographical distribution, *Andrena haynesi* 9495.
new records, reproduction, *Xeromelecia interrupta* 9493.
- USA, Indiana,**
infection, vectors, *Dirofilaria immitis*, *Aedes trivittatus*, *Aedes vexans* 9270.
new records, geographical distribution, *Mayctia persei* 8701.
new species, parasites, *Protomyobia indianensis*, taxonomy, morphology 1591.
oviposition, fecundity, habitat, *Toxorhynchites ambionensis* 5857.
seasonal variations, sex ratio, population dynamics, hatching, *Aedes triseriatus* 1266
sexual reproduction, flight activity, mating, oviposition, *Nectopsyche albidia* 3862
tree holes, leaf litter decomposition, food sources, *Aedes triseriatus* 9377.
- USA, Iowa,**
hematophagy, host preferences, disease transmission vectors, *Aedes*, *Culex* 1198.
life cycle, immigration, diapause, *Agrotis ipsilon* 5900.
new species, parasites, *Apheleus prociophilus*, *Prociophilus fraxinifolii* 39.
parasitoids, introduced species, population decline, *Eirborus terebrans*, *Lydella thompsoni*, *Macroctonus grandis* 6008.
spatial distribution, crop fields, *Diabrotica longicornis*, *Zea mays* 6118.
- USA, Kansas,**
phenology, adaptations, population studies, *Diatraea grandiosella* 6831.
pollution effects, bioaccumulation, lead, *Aphodius*, *Sphaeridium* 608.
- USA, Kentucky,**
check lists, surveys, *Mecoptera* 3152
new records, geographical distribution, *Poanes yehi* 7918.
new species, taxonomy, morphology, *Stenomema bedarini* 2432
seasonal variations, abundance, activity patterns, *Sitona hispidulus* 1277
surveys, check lists, *Membracidae* 3154
- USA, Louisiana,**
association, seasonal variations, *Acari*, *Dendroctonus frontalis* 4430
check lists, geographical distribution, new records, habitat, *Limnephiloida* 8695
infection, nuclear polyhedrosis virus, granulosis virus, seasonal variations, *Spodoptera frugiperda* 5751
new records, geographical distribution, check lists 8693
new records, geographical distribution, *Dolania* 3164
new records, geographical distribution, habitat, abundance, *Rhyacophilioida* 8694.
new species, taxonomy, morphology, *Automeris louisiana* 7228
paddy fields, breeding, abundance, *Culicidae* 2920.
pest control, biological control, parasites, *Lixophaga diatraeae*, *Diatraea saccharalis* 2957
pests, monitoring methodology, mapping, *Psorophora columbiae* 5397.

- USA, Louisiana, (continued)
queens, colonies, *Atta texana* 3046.
surveys, pheromone traps, population density, *Pseudophasia includens*, *Rachiplusia* sp., *Trichoplusia ni*, *Trichoplusia oxygramma* 8516
taxonomy, new species, morphology, *Leuctra szczytkoi* 1675
weed control, aquatic environment, introduced species, *Eichhornia crassipes*, *Najascheta eichhorniae* 1254
- USA, Louisiana, New Orleans
surveys, population density, *Aedes aegypti* 3679.
- USA, Maine
life history, population dynamics, pests, *Pissodes strobi*, *Pinus strobus* 6187.
parasites, *Hysopus dynamis*, *Phrynotrocta*, *boots*, *Pinus banksiana*, new records,
pest control, distribution, *Petrova albipuncta* 2057
- USA, Maine Coast
islands, population genetics, *Drosophila albanogam* 9435.
- USA, Maine, Penobscot R.,
Simulium penobscotense, habitat, vegetation, colonization, *Potamogeton*,
Sparganium 755
- USA, Maryland
abundance, crop fields, *Trichogramma*, *Zea mays* 5600.
crop fields, spatial distribution, sampling methodology, *Pseudaletia unipuncta* 6113.
crop field, damage, pest control, *Epilachna varivestita*, *Glycine max* 3795.
diets, foraging behavior, coexistence, *Holcophala abdominalis*, *Holcophala calva* 6029.
ethology, social behavior, copulation, flight activity, *Eudictoria tibialis* 2733
parasites, occurrence, *Varroa jacobsoni* 3760
pests, damage, *Nicotiana tabacum*, *Heliothis virescens*, *Heliothis zea* 4611
- USA, Massachusetts
bionomics, population dynamics, host plants, *Ophiomyia simplex*, *Asparagus officinalis* 6134
pesticides encapsulation, control, legislation, apiculture 3732
- USA, Massachusetts, Cape Cod
pest control, catching methods, population studies, *Tabanus lineola*, *Tabanus nigrovittatus* 732.
- USA, Michigan
activity patterns, sand flats, diurnal variations, seasonal variations.
Dasyneura 7518
Callisoma promethaea, larvae, food plants, associations, cocoons 2070
crop fields, abundance, species composition, *Carabidae* 3772.
geographical distribution, new records, life cycle, *Valgus hemipterus* 1954
life cycle, phenology, bogs, *Chaoborus* 7015.
parasites, species composition, new records, *Insecta*, *Acarina*, *Chiroptera* 7550.
pest control, historical accounts, *Lymantria dispar* 7786.
predation, *Aves*, *Plecoptera* 6820.
surveys, abundance, *Lymantria dispar* 2363.
zooplankton species composition, predation effects on, *Chaoborus americanus* 583.
- USA, Michigan, Douglas L. Region
abundance, surveys, *Noctuidae* 2364.
- USA, Michigan, Hunt Creek
larvae, competition, substrate preferences, dispersion, *Chironomidae* 2289
- USA, Minnesota
Lyme disease, case reports, man, vectors, *Ixodes dammini* 4492
new species, taxonomy, morphology, *Dixa pseudindiana* 2416.
paleoecology, fossils, plants, *Insecta* 791
- USA, Mississippi
check lists, geographical distribution, new records, habitat, *Limnephiloida* 8695.
crop fields, species composition, seasonal variations, *Heliothis* 1012
hardwoods, pests, abundance, seasonal variations, *Sesidae* 3786.
larvae, winter survival, population levels, *Anticarsia gemmatilis* 1273.
life cycle, host plants, *Heliothis zea*, *Heliothis virescens* 3085
new records, geographical distribution, check lists, *Hydropsyche* 8693
new records, geographical distribution, habitat, abundance, *Rhyacophoridae* 8694
parasitoids, crop fields, *Heliothis zea*, *Heliothis virescens* 6168
pest control, insecticides, *Heliothis* 693
phenology, adaptations, population studies, *Diatraea grandiosella* 6831
population structure, castes, seasonal variations, *Reticulitermes flavipes* 2137
temperature effects, emergence, species composition, *Chironomidae* 50.
winter survival, forest floor litter, *Anthonomus grandis* 614.
- USA, Mississippi R.
benthos, colonization, *Cheumatopsyche*, *Potamia flava*, *Hydropsyche* 6226
- USA, Missouri
check lists, new records, geographical distribution, host plants, *Chrysomelidae* 4740.
flowering phenology, host plants, pollination, *Insecta* 2047.
new records, geographical distribution, host plants, *Cerambycidae* 8698.
new species, taxonomy, morphology, *Stenomera bednari* 2432.
overwintering survival, *Agrois ipilion* 9202.
phenology, adaptations, population studies, *Diatraea grandiosella* 6831.
population dynamics, environmental effects, crop fields, *Schizaphis graminum*,
Sorghum 6151.
- USA, Montana
biological control, field trials, pasture, *Bacillus thuringiensis israelensis*,
Aedes 6149.
feeding, predations, crop protection, *Acridiidae* 4614
foraging behavior, predator-prey interactions, prey spatial distribution, diet
variations, *Parulidae* 4421.
pathogens, serotyping, *Rickettsia*, *Dermacentor andersoni* 1006
prey activity patterns, predator-prey interactions, *Insecta*, *Parulidae* 4421.
sexual behavior, mating, taxonomy, morphology, *Pseudomethocha pruginosa* 4295
- USA, Montana, Flathead R. Basin
Acrisophyes grandis, phenotypes, larvae, polymorphism 1714.
- USA, Nebraska
colonies, survival, population dynamics, *Pogonomymex occidentalis* 6987
host plants, infestation damage, *Cirsium canescens*, *Corythocha distincta* 5198
infestation, host plants, *Cirsium canescens*, *Corythocha distincta* 9163.
morphology, wings coloration, classification, *Timonotrupis sparsa* 8890
pests, infestation, geographical variations, damage, *Pinus ponderosa*, *Rhyacionia*
bunellii 4405
- USA, Nebraska, Niobrara R.
power plants, environmental impact, flushing, abundance, *Insecta* 8611.
- USA, Nevada
foraging behavior, aggressive behavior, predator-prey interactions, *Phrynosoma*
platyrhinus, *Pogonomymex californicus*, *Pogonomymex rugosus* 2145.
species composition, abundance, *Orthoptera* 3153.
- USA, Nevada, Clark County
species composition, habitat, life cycle, *Lepidoptera* 5145.
- USA, Nevada, Spring Range
biogeography, species composition, montane environments, *Lepidoptera* 7914.
- USA, New England
association, population dynamics, *Catocala neogama*, *Catocala recta* 7613
geographical distribution, damage, host plants, *Pinus resinosa*, *Pinus boerneri*,
Pinus coloradensis 8697
ovary development, autogeny, environmental factors, *Chrysops* 1131
- USA, New Hampshire
dispersal, flight activity, seasonal variations, *Tetraops tetraophthalmus* 443
habitat, rearing, larvae, *Chrysops* 2903
- USA, New Hampshire, Mount Washington
pollination, host plants, *Mimulus lewisianus*, *Diptera*, *Hymenoptera* 5974
- USA, New Jersey
brackishwater environment, ponds, population dynamics, *Chironomus decorus* 7014
breeding sites, storm water drainage systems, *Culicidae* 2918
life history, population dynamics, *Oligoneurus siles*, infestation, *Ilex crenata* 444
morphology, aberrants, *Satyrus calanus falacer* 7276
parasitoids effects on population decline, extinction, *Xanthorhiza politum* 2034
pest outbreaks, defoliation, *Lymantria dispar* 4542
population establishment, abundance, urban environments, *Vespa germanica*,
Vespa maculifrons 8200
population establishment, abundance, *Vespa germanica*, *Vespa maculifrons* 6326
seasonal variations, population levels, abundance, *Chironomus decorus* 5243
trees, infestation, nests, damage, *Camponotus pennsylvanicus* 8480
- USA, New Jersey Coast
oviposition, flight activity, salt marshes, *Hybomitra dasecki* 6710.
pests, habitat, *Culex salinarius* 6054.
- USA, New Mexico
activity patterns, abundance, association, plant communities, *Arachnida* 1953
Eledone obscura, interspecific competition 2157.
feeding behavior, borers, *Crossidius pubellus*, roots, *Quercus sarothrae*,
Gutierrezia microcephala 488
grasslands, habitat, population density, *Hemileuca olivae* 8374
grasslands, larvae, activity patterns, movements, *Hemileuca olivae* 3653
morphology, exotic species, *Lepidoptera* 5529
new species, morphology, geographical distribution, *Zale chisosensis* 5603
new species, taxonomy, morphology, *Prionus arenarius* 7957.
parasites, hosts, *Mallophaga*, *Numenius americanus* 5581
plant communities, ecological distribution, environmental impact, herbivores
2063
plants, association analysis, community composition, *Insecta*, *Xanthocephalus*
sarothrae, *Xanthocephalus microcephala* 2064.
population dynamics, life history, *Hemileuca olivae* 5899
seasonal variations, activity patterns, *Tenebrionidae* 8284.
- USA, New Mexico, Lincoln Co.
mangroves, grazing, eggs persistence, *Hemileuca olivae* 8575.
- USA, New Mexico, Sacramento Mts.
leaf litter, herbivores, community composition, species richness, *Insecta* 9187
- USA, New York
abundance, seasonal variations, larvae, crop fields, *Lepidoptera* 6119
activity patterns, night, *Apis mellifera* 8287.
aggregation behavior, parasitoids, *Apomeloides tylosa* 5143
apiculture, pesticides, effects on mortality 7152
flowers, association, *Lewandodendrum tulipifera*, *Lygocoris carae*, *Lygocoris*
omnivagus, *Cantharidae*, *Cephalopoda* 5966.
fungus, *Umbelliferae*, phototoxicity, herbivores, *Oecophoridae*,
Paphiopedilum 2079.
geographical distribution, new records, *Ectobius tylosa* 2472.
life table, pupae survival, overwintering, *Agrostis stolonata* 440
new records, geographical distribution, *Meconema thalassinum* 5525
new species, taxonomy, morphology, genitalia, *Pallus physarpi* 2435
new species, taxonomy, morphology, *Trichogramma julianoi* 4867
pathogens, infestation, *Entomophthora culicis*, *Chironomidae* 5036
pathogens, larvae, *Erynia aquatica*, *Aedes stimulans* 8152
Tetranychus nudus, parasites, new species, *Tetranychus nudus*, *Simulium* 1014
- USA, New York, Hudson R.
production, biomass, dry weight, *Cricotopus sylvestris* 756.
- USA, New York, Lockport
paleoecology, environmental changes, vegetation, species composition, *Coleoptera* 7127.
- USA, New York, Tond Harbor Swamp
habitat selection, breeding sites, emergence, water levels, *Culiseta melanura*,
Culiseta morsitans 6873.
- USA, North Carolina
apiculture, predation, bees, *Ursus americanus*, *Apis mellifera* 5379.
biological control, pest control, pools, *Dugesia tyrima*, *Culicidae* 2927.
dispersal, population dynamics, *Drosophila* 3634
fecundity, population structure, kitchens, houses, *Blattella germanica* 6032
forest floor litter, nutrients, decomposition, *Arthropoda* 2114
forests, canopies, community composition, nutrient content, *Arthropoda*, USA,
North Carolina 2144
geographical distribution, occurrence, *Euphyes bimaculata* 8690.
Insecta, association, feeding behavior, *Euphorbia maculata* 2855
life history, production, feeding, larvae, *Brachycentrus spinus* 1484
new records, geographical distribution, *Tanytarsus coffmani* 7117
new species, taxonomy, morphology, *Hyalomys mitchellensis* 5589
pest control, chemical control, *Insecta*, *Pinus strobus* 2982
pests, life history, chemical control, damage, host plants, *Mindarus abietinus* 4336
plantations, abundance, seasonal variations, *Pulgoridea* 1313.
pollinators, *Claytonia virginica*, *Andrena engelae*, *Bombus major* 2065
population structure, species diversity, *Acan. orchards*, *Malius* 588
population studies, seasonal variations, developmental stages, competition,
Scarabaeidae, *Popillia japonica* 600
sampling, pheromone traps, surveys, geographical distribution, *Dipron similis* 8552
- USA, North Dakota
weed control, environment management, *Carduus nutans*, *Rhynchosia conicus*,
Ceanothus nictitans 2208.
- USA, Northeast
geographical distribution, range extension, new records, *Acanalonia conica* 2367
- USA, Ohio
new records, *Trichoptera* 3150.

USA, Ohio, (continued)

pest control, chemical control, vegetables, *Listronotus oregonensis* 2973.
pest control, forests, *Enaphalodes rufulus* 2209
temperature effects on flight activity, predation, *Ostrinia nubilalis* 5124.
trees, larvae, habitat preferences, ecological distribution, *Culicidae* 1951.

USA, Ohio, Grand R.,

species composition, community structure, habitat, *Odontata* 3854

USA, Oklahoma,

pests, abundance, temperature effects on, grazing, *Schizaphis graminum* 6922

USA, Oregon,

development, larvae, oviposition, population density, emergence, *Scirpophis obscurus*, host-parasite interactions, *Dolichotarsus* 448
flight activity, adults, biology, eggs, larvae, *Pleocoma* 6729.
life history, development, overwintering, *Operophtera occidentalis* 8282
life history, morphology, eggs, larvae, pupae, *Caurinus* 7523.
new species, taxonomy, morphology, *Quedius* 2399.
pests, infestation, *Rhagoletis pomonella* 3762.

USA, Pennsylvania,

collections, Academy of Natural Sciences, *Collemola* 3136.
ectoparasites, life history, abundance, *Forinia externa*, *Tsuga canadensis* 437.
galls, interspecific relationships, *Asphondylia helianthoglobulus*, *Rileyia americana*, *Torymus advenus*, *Torymus* 5182.
geographical distribution, new records, *Malsouscus resinose* 3163
Insecta association, feeding behavior, *Euphorbia maculata* 2855
life cycle, feeding, host plants, *Coccophaps sanguinarius*, *Lygocoris vitticollis* 5902
paleoecology, swamps, Upper Carboniferous, *Insecta* 2376
population studies, coloration, melanism, *Biston cognataria* 7579
soil requirements, sex differences, mud feeding, *Peris rapae* 4346.
soil assemblages, *Cicadellidae* 5229.
soil, occurrence, night, *Cicadellidae* 9104.
wildlife, parasites, *Urocyon cinereoargenteus*, *Sarcoptes scabiei* 5193.

USA, Pennsylvania, Limesville Creek,

check lists, flight activity, adults, *Trichoptera* 7027.

USA, Rhode Island,

new records, geographical distribution, *Meconema thalassimum* 5525.

USA, Rhode Island, Barrington,

pest control, control programs, environment management, wetlands, *Aedes sollicitans* 5359.

USA, Rocky Mts.,

foraging behavior, energy intake optimization, *Aconitum columbianum* flowers, *Bombus* 4345
life cycle, ecological distribution, diets, *Colias alexandria* 7517.

USA, South Carolina,

Bourletella gibbosis, taxonomy, new species, morphology, color 1620.
catching methods, traps, bait, sex pheromone, *Dioctria discula* 425.
community composition, species diversity, habitat comparison, *Formicidae* 1269.
host-parasite interactions, *Lepidoptera*, *Apanteles marginiventris*, *Metecorus autographae*, *Glycine* max 507.
morphology, adults, *Smunithrus floridanus* 4943.
new species, new genera, taxonomy, morphology, *Comptermes oconensis* 3194.
new species, taxonomy, morphology, *Smunithrus carolinensis* 1617.
overwintering behavior, ecological distribution, *Hemiptera* 455.
parasitism, *Tachinidae*, *Pentatomidae* 2019.
pesticide resistance, methyl parathion, susceptibility, insecticides, *pyrethroids*, *Heliothis virescens* 4226.
seasonal variations, predator-prey interactions, abundance, *Cinara*, *Essigella pini*, *Pinus taeda* 594.
surveys, abundance, pests livestock, *Musca autumnalis* 3673.

USA, South Dakota,

identification, *Insecta* 2940

pest control, environment management, *Insecta* 3758.
pests, population decline, environmental effects, grazing, weather, *Tabanus similis*, *Chrysops aestuans* 4474.
pests, population levels, *Tabanus*, *Chrysops* 8576
species composition, flight activity, keys, *Catocala* 7917.

USA, Southeast,

Brachys tessellatus, bionomics, life history, host plants, *Quercus laevis* 1988
Drosophila major, geographical distribution 1716
new species, taxonomy, morphology, *Alluaudiomyia variegata* 7968.
new species, taxonomy, morphology, habitat, *Nimboera pinderi* 4845.
new species, taxonomy, morphology, *Setodes dixiensis*, *Setodes arenatus* 5612
wood litter fall, association, abundance, feeding, *Reuticulitermes flavipes*, *Reuticulitermes virginicus* 8598

USA, Southeastern states,

geographical distribution, *Scapteriscus vicinus*, *Scapteriscus aetetus* 2360.

USA, Southwest,

new records, geographical distribution, *Siphonuridae* 7113.
new species, taxonomy, morphology, *Thermonectus sibleyi*, *Thermonectus zimmermani* 7953.
nontarget organisms, pest control, *Cochliomyia hominivorax* 2206

USA, Tennessee,

abundance, pests, host plants, *Leguminaceae*, *Platyphena scabra* 1425.
emergence, seasonal variations, *Anthonomus grandis* 446
pest control, water management, reservoirs, *Culicidae* 2935.

USA, Tennessee, Warren Co.,

cavernicolous species, new species, taxonomy, morphology, *Tychobothrus striatini* 4815.

USA, Texas,

abundance, seasonal variations, livestock feces, *Histeridae* 4481.
biological control, pest control, parasites, *Ceroplastes cirripediformis* 6116.
case reports, infestation, pathology, *Notoedus cati*, *Felis rufus* 3685.
chromosomes transmission, population genetics, *Drosophila melanogaster* 3126.
colonies, ecological distribution, habitat, *Phaeoleia lama* 6986
colonies, geographical distribution, ecological distribution, *Solenopsis* 6995.
eggs, predation, crop fields, *Heliothis virescens* 6124.
escape behavior, avoidance behavior, heat, foraging behavior, *Cicindela ocellata* 9118.
food preferences, seasonal variations, *Gnathamitermes tubiformans* 482.
geographical distribution, new records, *Phytomyza occidentalis* 2362.
habitat selection, vegetation patterns, grasslands, *Orthoptera* 6853.
host plants, geographical distribution, ecological distribution, *Cerambycidae* 1944.
host plants, life cycle, *Prosopis*, *Tetralopha euphemella* 5961.
hosts, blood meals, domestic animals, females, *Psorophora columbiae* 6074.
life cycle, life span, fecundity, emergence, *Perlesta placida* 3859.

USA, Texas, (continued)

morphology, coloration, aberrants, *Chlosyne lacinia* 8042.
mortality, blood meals, infestation, *Bos indicus*, *Aedes sollicitans* 3660.
mortality, developmental stages, crop fields, *Anthonomus grandis grandis*, *Gossypium* 6125.
new records, geographical distribution, *Monobia biangulata* 2369.
new records, geographical distribution, *Oxytelus incisi* 2371.
new species, morphology, geographical distribution, *Zale chisosensis* 5603.
new species, morphology, taxonomy, *Invreia* 3221.
new species, new genera, taxonomy, morphology, *Mariapteryx carancacha* 5604.
new species, taxonomy, morphology, *Bocharia shirleyanae* 3171.
new species, taxonomy, morphology, *Hemiteles maia peigeri* 6446.
new species, taxonomy, morphology, *Labridolus cepula* 5586.
new species, taxonomy, morphology, *Symmetrischema kendallorum* 7992.
parasites, *Carya pecan* pests, *Monellia caryella* 6155.
parasites, eggs, *Trichogramma*, *Heliothis* 4383.
parasites, *Physoccephalus sexalatus*, *Ascarops strongylina*, *Gongylolema pulchrum*, *Onthophagus gazella* 9203.
parasites population growth, seasonal variations, *Psoroptes ovis* 517.
parasitism, oviposition, host specificity, *Trichopoda plumipes* 2073.
parasitism, stylization, hosts, *Stylops crawfordi*, *Andrena* 6624.
parasitism, *Tachinidae*, *Pentatomidae* 2019.
pest control, biological control, parasites, USA, Texas, *Chrysomphalus asonidium* 3798.
pest control, insecticides, efficacy, *Oligonychus pratensis*, USA, Texas 1473.
pest control, mapping, damage, *Dendroctonus frontalis* 9317.
pest control, parasites, *Chrysomomyia*, *Liriomyza sativae*, *Liriomyza trifolii* 4600.
plants, association analysis, community composition, *Insecta*, *Xanthocephalum anthrax*, *Xanthocephalum microcephala* 2064.
pollination, flowering, *Nymphaea elegans*, *Insecta* 5209.
pollinators, foraging behavior, nesting behavior, *Diadasis afflictia* 9358.
population dynamics, host plants, *Heliothis* 6015.
seasonal variations, occurrence, *Diatraea grandiosella* 9102.
Tabanus abactor, geographical distribution, seasonal variations 2361.
taxonomy, new species, morphology, keys, *Rhagoletis optata* uniformis 2420.
Triticum crop fields, surveys, biotypes, *Schizaphis graminum* 3761.

USA, Texas, Barton Creek Canyons,
species composition, abundance, habitat, *Lepidoptera* 7915.

USA, Texas, Brazoria Co.,
pest outbreaks, environmental effects, *Aedes sollicitans* 4523.

USA, Texas, Lower Rio Grande Valley,
pollinators, species composition, *Helianthus annuus*, *Hymenoptera* 9155.

USA, Texas, Madison Co.,
colonial characteristics, queens, *Solenopsis invicta* 9365.

USA, Texas, Padre I.,
new species, new genera, morphology, taxonomy, *Neonanorchestes* 2381.

USA, Texas, Rio Grande Valley,
geographical distribution, abundance, phenology, *Scolidae* 1975.

USA, Texas, Village Creek,
identification, *Abalatesmyia janta* 4107.

USA, Utah,
first records, nests, morphology, mouthparts, *Osmia sculleni* 5880.
linkage disequilibrium, population genetics, *Drosophila montana* 1558.
new records, nests, pollen, food sources, *Osmia sculleri* 9101.
pest control, host plants damage, *Phigalia plumigera*, *Purshia tridentata* 3025.
population structure, sex ratio, annual variations, *Osmia lignaria* 6871.

USA, Vermont,
dispersal, flight activity, seasonal variations, *Tetrapotes tetrathalmus* 443.
pests, infestation effects on yield, *Agromyza frontella*, *Medicago sativa* 8563.

USA, Virginia,
abundance, ecological distribution, pest control, salt marshes, inland water environment, *Culicidae* 8610.
check lists, *Trichoptera* 3935.
community structure, pollution effects, sewage effluents, streams, *Insecta* 7814.
crop fields, predators, population density, *Arthropoda*, *Glycine* max 6190.
geographical distribution, new records, *Acleris macana* 3161.
geographical distribution, range extension, *Hylemyia lugax* 300.
life cycle, host plants, *Solanum carolinense*, *Frumenta undinella* 4329.
new species, taxonomy, morphology, *Taeniopteryx nelsoni* 4906.
parasites, infestation, *Rhinocyllus conicus* 5937.
population studies, swarming, mating behavior, *Culicoides variipennis* 5106.
predation, feeding behavior, *Cordilura varipes*, *Culicoides variipennis* 6041.
seasonal variations, occurrence, emergence, *Epimeroptera* 3054.
spatial distribution, abundance, urban environments, houses, *Blattella germanica* 3645.

USA, Virginia, Clinch R.,
geographical distribution, population density, zonation, *Dryopoidea* 4658.

USA, Virginia, North Fork Holston R.,
geographical distribution, population density, zonation, *Dryopoidea* 4658.

USA, Washington,
activity patterns, diel variations, seasonal variations, body temperature, weather, *Tenebrionidae* 8274.
chemical control, insecticides degradation, ash effects on, *Laspesyesia pomonella* 3785.
disease transmission, beet western yellow virus strains, *Myzus persicae* 6139
host plants, weeds, beet yellow virus vectors, *Myzus persicae* 6175
integrated control, methodology, *Psylla pyricola* 3008
life cycle, reproduction, *Choristoneura occidentalis* 7519.
pest outbreaks, orchards, *Pseudococcus maritimus*, *Pyrus communis* 8498.
seasonal variations, population levels, host plants abundance, *Myzus persicae* 598
weeds, host plants, association, species composition, *Lygus* 8350

USA, West,
habitat, life history, *Theclinae* 7513
new species, taxonomy, morphology, *Ammophila silvestris* 6442.

USA, West Virginia,
mutualism, myrmecophily, plant communities guilds, *Formicidae* 2837

USA, West Virginia, Mingo Co.,
life history, ecology, aquatic animals, *Baetis* 2292.

USA, West Virginia, Monongahela National Forest,
infection, *Cryptococcus fagisuga*, *Nectria galligena* association, *Fagus grandifolia* 9276

USA, Wisconsin,
abundance, geographical distribution, *Danaua plexippus* 7566.
infestation, predictions, *Choristoneura pini*, *Pinus banksiana* 603

Subject Index

- USA, Wisconsin, (continued)**
new records, predation, *Sciurus carolinensis*, pupae, *Anthera polyphemus*, *Attacus atlas* 5265.
new species, taxonomy, morphology, *Hydrochra simula* 4819.
parasitoids, life cycle, *Phaenogonopora sulcata*, *Agilus bilineatus* 2016.
pests, borers, life history, *Agilus bilineatus* 4335.
practices, detritus processing, soil microorganisms, *Arthropoda* 2287.
- USA, Wyoming,**
Cyrtopogon sabroskyi, taxonomy, new species, morphology, genitalia 2421
foraging behavior: flowers, prairies, *Hymenoptera* 3564
new records, geographical distribution, caves, *Glaucidium bathysciodes* 8702
- USA, Wyoming, Grand Teton Natl. Park,**
foraging behavior, predator-prey interactions, prey spatial distribution, diel variations, *Parulidae* 4421.
prey activity patterns, predator-prey interactions, *Insecta*, *Parulidae* 4421.
- Usambilla,**
taxonomy revision, new genera, new species 1669.
- USSR,**
activity patterns, seasonal variations, forests, *Carabidae* 6716.
apiculture, production, economics 2966.
diets, tundra, larvae, *Tipulidae* 6738.
geographical distribution, new records, *Symphyla* 7100.
grasslands, biomass, diurnal variations, *Orthoptera* 9198.
heavy metals bioaccumulation, sex differences, rivers, *Dytiscidae* 5436.
karyotypes, *Chironomidae* 9405.
karyotypes, population genetics, *Glyptotendipes barbipes* 4695.
keys, morphology, *Pharora* 6482.
new records, geographical distribution, new species, *Sciarae* 6396
new records, geographical distribution, *Sphaerolaelaps holothroides* 9474.
new species, geographical distribution, *Chebrenites taianensis* 16
new species, morphology, *Strongylophthalmyia stackelbergi* 27.
new species, new genera, taxonomy, morphology, *Diapterobius crinitus*, *Paraceratoppia meridionalis* 6341.
new species, new genera, taxonomy, morphology, *Elongeuma speophium* 8843.
new species, new genera, taxonomy, *Pacificulus imbricatus*, *Anaulaculus golovitchi* 6465.
new species, new records, *Pauropodidae*, *Euryptropodidae* 4070.
new species, taxonomy, morphology, *Clareola crassula*, *Strongylophthalmyia raricomis* 6395.
new species, taxonomy, morphology, *Epanerchodus polymorphus* 6464.
new species, taxonomy, morphology, *Galumna zachvatkini* 6348.
new species, taxonomy, morphology, *Niphocopeus abogensis*, *Proteramaeus macleani*, *Aspermaeus longipes* 7933.
new species, taxonomy, morphology, *Tarsonemus* 6347.
new species, taxonomy, *Neocyclus silfverbergi*, *Corimalla betpakdalensis*, *Apon tomense* 5557.
new subspecies, taxonomy, morphology, *Tabanus canipalpis tertiarum* 6390.
pesticide residues, pest control, DDT, *Ixodes persulcatus* 9253
pesticide resistance, DDT, *Anopheles* 9439.
pesticide resistance, malaria vectors, *Anopheles* 9438.
population studies, pesticide resistance, DDT, *Anopheles* 9436
species composition, geographical distribution, habitat, *Culicidae* 9460
species composition, *Haemaphysota* 9477.
surveys, host plants, pollination, *Apoidea* 789.
taxonomy, morphology, *Cephalidae*, *Tentredinidae* 4102
zoogeography, *Eumenes pedunculatus*, *Eumenes coarctatus*, *Eumenes coronatus*, *Eumenes papillarius* 7893.
zoogeography, geographical distribution, *Hilaira* 7905
- USSR, Abakun,**
diets, fertility, *Culicoides simulator* 9197.
- USSR, Abkhazia,**
new genera, new species, taxonomy, morphology, *Agekiella koponeni* 6429
- USSR, Amur,**
new records, geographical distribution, *Chrysops anthrax*, *Hybomitra nigella* 9462
- USSR, Armenia,**
new species, taxonomy, morphology, *Atholus khzoriani* 8766
- USSR, Armenia, Sayay Reservoirs,**
population dynamics, reservoirs, *Aedes* 9374
- USSR, Armenia, Sevan L.,**
life cycle, production, *Chironomus plumosus* 7805
- USSR, Azerbaijan,**
new species, taxonomy, morphology, *Psychodidae* 3199
phenology, life cycle, *Graphiphora*
- USSR, Balkai,**
species composition, breeding, population density, *Culicidae* 9220
- USSR, Caucasus,**
new subspecies, taxonomy, morphology, *Notodontidae* 4043
- USSR, Caucasus Mts.,**
new species, taxonomy, morphology, *Barchaeta caucasica* 6397
- USSR, Coast,**
islands, species composition, *Culicidae* 9489
- USSR, Crimea,**
new species, taxonomy, morphology, *Tarsonemidae* 6342
- USSR, Donetsk,**
species composition, flight activity, *Diptera* 9195
- USSR, Georgia,**
new genera, new species, taxonomy, morphology, *Hadzhubeylia physocerci* 6440
occurrence, *Aedes vexans nipponi* 9461
- USSR, Kazakhstan,**
effects on grasslands community composition, *Acrididae* 589
new species, taxonomy, morphology, *Baetis chantaensis* 7190
new species, taxonomy, morphology, *Stenus jossefranki* 7952
parasites, species composition, *Arthropoda*, *Rattus norvegicus norvegicus* 9144
- USSR, Magadan Region,**
new species, new genera, *Eumidea paludosa*, *Eumidea tundrosium* 6340
- USSR, Peter the Great Mts.,**
sub-alpine environments, species composition, *Rhopalocera* 7088
- USSR, Russia,**
new species, taxonomy, morphology, *Ascoschoengastia danrela* 7146
- USSR, Russia, Khabarovsk Region,**
new subspecies, taxonomy, morphology, *Conophelus dorsalis beybenkoi* 7239
- USSR, Sakhalin I.,**
new species, taxonomy, morphology, *Pseudophyllus clavatus* 6439
- USSR, Siberia,**
morphology, redescription, *Vertagopus reuteri* 7272
new species, taxonomy, morphology, *Phaonia asiatica* 6393
- USSR, Siberia, (continued)**
new species, taxonomy, morphology, *Polyzonum valerii*, *Polyzonum cyathiferum* 6463.
pests, forests, galls, development, *Dasineura larcus* 6940.
species composition, *Ehria*, *Lathrorax*, *Rhaeborhax*, *Thyphochrestus* 7106.
- USSR, Siberia, Kamchatka Peninsula,**
species composition, xylophagous species, *Monochamus* 7084.
- USSR, Stavropol,**
tularemia, disease transmission, epidemiology, *Ixodes redikorzevi* 9232.
- USSR, Tadzhikistan,**
species composition, zoogeography, alpine environments, *Rhopalocera* 7071
- USSR, Tadzhikistan,**
new species, taxonomy, morphology, *Chazara rangontavica* 7234
- USSR, Tajikistan,**
sindbis virus isolation, *Hyalomma anatolicum* 9250
- USSR, Tajikistan, Isfarin,**
Sprochetsos, incidence, disease transmission, *Ixodidae* 9242
- USSR, Teploye L.,**
new species, taxonomy, morphology, *Prodiamesa levandovae* 6389
- USSR, Transcaucasia,**
new species, taxonomy, morphology, *Rumicita grandicula*, *Aphalara migrmaculosa*, *Podilya montana* 6423
- USSR, Turkmenia,**
new species, taxonomy, morphology, *Scenopinus mariensis* 7973
- USSR, Turkmenistan,**
new species, taxonomy, morphology, *Clavelocnemus beaumonti* 8823
- USSR, USSR,**
new species, taxonomy, morphology, *Chloeobus struempeli*, *Macrotrahus polylineatus*, *Sibma karakumica*, *Apion amudense* 4795
- USSR, Ukraine,**
new species, taxonomy, morphology, *Parapanteliella eugeniae* 7218.
pests, species composition, crop fields, *Triticum*, *Carabidae* 6919
- USSR, Ukraine, Carpathian Mts.,**
succession, community composition, *Staphylinidae* 6867
- USSR, Uzbekistan,**
new species, taxonomy, morphology, *Chrysomella tobiasi* 6428.
- Uterus,**
glands, separation techniques, methodology, *Glossina morsitans* 61.
- Utethesia ornatrix,**
sex pheromone, courtship role, biochemical analysis, diets 4304
- Utilization,**
dung, forests, *Uroxys gorgon*, *Noctua parilis*, Panama 8370.
- UV radiation,**
effects on rearing, *Trichogramma brassicae*, *Coryca cephalonica* eggs 7450
- Vaccinium,**
new plants, host preferences, *Rhagoletis mendax* 3639
- Vaccinium corymbosum,**
pests, surveys, *Arthropoda*, USA, Arkansas 4551.
- Vacusus Vicinus,**
surveys, West Indies 1612.
- Vagha biancol,**
new species, morphology, taxonomy, India 2380
- Vairimorpha necatrix,**
biological control, microsporidiosis persistence, *Ostrinia nubilalis* 8495
pathogenicity, larvae mortality, *Ostrinia nubilalis* 8168
pathogens, pest control, transmission (transovarial), *Lepidoptera* 8125
pest control, mortality, susceptibility, infection, *Lepidoptera* 2965
- Valanga irregularis,**
photoreceptors, response, light intensity, adaptations 4969
- Valanga irregularis,**
digestive tract, muscles, glycosidases, characterization 2565
- Valgus hemipterus,**
new records, geographical distribution, life cycle, USA, Michigan 1954.
- Vandex dudleyi,**
new species, taxonomy, morphology, Malawi 5564.
- Vanduzee arquala,**
mutualism, survival effects on abundance, *Formica subsericea* 6749
- Vanellus vanellus,**
infestation, parasites, *Mallophaga* 9143
new records, parasites, *Actornithophilus gracilis*, *Quadriceps junceus*, *Saenundonata temporalis*, Spain 8334
- Vanessa atalanta,**
aggressive behavior, territorial behavior 6993
- Vanessa cardui,**
habitat, occurrence, British Isles 5910
larvae, chromosome number 2322
migrations, swarms, Poland Coast 5212.
occurrence, abundance, British Isles, Scotland 6705
- Vapors,**
absorption, water balance, frontal bodies role, semiarid environments, *Arenivaga* 977
density, water loss, eggs, *Hemileuca olivae* 234.
oil, *Blumea erantia*, effects on reproduction, *Earias vitella* 7454
water, adsorption, water balance, *Arenivaga* 977
water, adsorption, water balance, *Psoocoptera* 3366
- Vargatula pacifica,**
new species, taxonomy, morphology, Solomon Is., Nissan I. 8730.
- Variability,**
X chromosome, recombination, sex linkage, genetic variance, *Drosophila melanogaster* 5461
coloration, population studies, *Aphantopus hyperantus*, Finland 2104.
flight activity, food availability effects on, *Spodoptera exempta* 580.
host plants resistance, *Cylas formicarius*, *Ipomoea batatas* 1233.
nesting behavior, *Crabro advena* 438
sound production, auditory communication, *Drosophila nasuta* 1164.
susceptibility, geographical distribution effects on, Japanese encephalitis virus, *Culex tritaenior* 273
- Variance,**
statistical Analysis, male sterility, competitiveness, *Insecta* 2480
- Variants,**
song, populations, hybrids, *Chorthippus mollis* 2755.
- Variation,**
allozymes, population genetics, *Nothomyrmica macrops*, Australia 3123.

Variation, (continued)

development rates, *Tribolium castaneum* 1088
structure, genes, ribosomes, rRNA, *Drosophila melanogaster* 5448
time, population dynamics, mathematical models, *Insecta* 5239.

Variations,

morphology, zoogeography, intraspecific relationships, *Decticus verrucivorus*,
Decticus albicornis 4701.
wings, genetics, clines, *Heteronympha merope merope*, Australia 3925.

Varieties,

host plants, pest preferences, *Coryca cephalonia*, *Triticum aestivum* 7674.
host plants, pest resistance, *Leucodermes orbonalis*, *Solanum melongena* 7676
host plants, pest resistance, *Sorghum bicolor*, *Zea mays*, *Chilo patellus* 7732
host plants, pests development, *Amarca devastans*, *Earias vitella*, *Gossypium*
7791
host plants, pests, population growth, *Spodoptera litura*, *Acrathis hypogaea* 6913.
hybrids, pest resistance, host plants, *Blissus insularis*, *Stenotaphrum secundatum*
4556

pathogenicity, *Bacillus thuringiensis*, *Culicidae* 2639.
pest resistance, *Nilaparvata lugens*, *Oryza sativa* 6197
plant breeding, pest resistance, *Oryza sativa*, *Orseolia oryzae* 522
susceptibility, pests infestation, *Saccharum officinale* 6952

Varroa jacobsoni,

apiculture pests, chemical control 4586
infestation, colonies, apiculture, *Apis mellifera* 2975
infestation, pest control, apiculture, *Apis mellifera* 7750
morphology, females, phoretic behaviour 4110
parasites, colonies damage, *Apis cerana* 4380
parasites, infestation, colonial characteristics, *Apis mellifera* 5183
parasites, infestation, colonies, *Apis mellifera*, Brazil 4456
parasites, infestation, effects on apiculture, *Apis mellifera* 2971
parasites, infestation, geographical distribution, *Apis mellifera* 2816
parasites, occurrence, USA, Maryland 3760
pest control, chemical control, hives, *Apis mellifera* 4599.
pests, apiculture, reviews 5945.

Varroa jacobsoni oudemans,

activity patterns, rhythms, motivation 9089

Vascular bacteriosis,

disease transmission, check lists, vectors, *Xanthomonas manihoti*, *Manihot*
esculenta, *Insecta* 4528

Vavria culicis,

parasites, new records, geographical distribution, *Aedes polynesiensis*, Tokelau
Is 9196

Vector-borne diseases,

plant diseases, viruses, epidemiology, *Oryza sativa*, *Insecta* 9275.

Vectors,

adults, morphology, identification, *Simulium squamosum* 869.
Aedes albopictus, dengue, man 9226.
African trypanosomiasis, capture-recapture studies, flight range, *Glossina*
fuscipes guineensis, Congo, People's Rep. 4490.
African trypanosomiasis, disease control, *Glossina*, Uganda 4495
arbovirus, population dynamics, mortality, *Aedes africanus*, Uganda 8369
babesiosis, livestock, *Hyalomma marginatum rufipes* 3693.
barley yellow dwarf virus, detection, serological tests, *Aphididae* 6611.
barley yellow dwarf virus, yield, *Triticum*, *Rhopalosiphum padi* 8444
beet curly top virus, identification, enzyme-linked immunosorbent assay,
Cucurbitur telorus 9273.
beet plows virus, host plants, weeds, *Myzus persicae*, USA, Washington 6175.
blueberry shoestring virus, chemical control, insecticides, *Ilinoia pepperi*
8458.
blueberry shoestring virus, disease control, insecticides, *Ilinoia pepperi* 4630.
bluetongue virus, chemical control, ozone fumigation, biological safety cabinets,
Culicoides variipennis 8477.
bluetongue virus, disease control, *Culicoides variipennis* 4510.
bluetongue virus, disease control, fumigation, ozone, *Culicoides variipennis*
4519.

Brelinia sergenti, *Culex pipiens pallens*, *Aedes albopictus*, China, People's Rep.,

Yunnan Province 5288.
Brugia malayi, *Mansonia bonnea*, *Mansonia annulata*, *Mansonia uniformis*, *Mansonia*
diversa, Indonesia, Bengkulu 6062.

cattle redwater fever, infection, effects on survival, sexual reproduction,
Babesia bigemina, *Boophilus decoloratus* 4205.

Chagas' disease, surveys, methodology, *Triatoma infestans* 8437.

Chagas disease, juvenile hormones, analogs, structure-activity relationships,
Panstrongylus megistus 5000.

Chikungunya virus, disease transmission, comparative studies, *Ornithodoros*

savignyi, *Culex*, *Aedes*, *Mansonia* 1380.

climatic distribution, *Cicadellidae*, USA, Florida 6174.

Colorado tick fever, *Dermacentor andersoni*, *Rodentia*, USA 637.

dermatitis, case reports, *Rodentia*, *Ornithomyia bacoti* 1363.

X disease, abundance, vegetation patterns effects on, orchards, *Cicadellidae*

3836.

X disease, factors affecting orchards colonization, *Cicadellidae* 6173

disease spread, historical account, *Phlebotomus papatasi*, *Phlebotomus sergenti*,

Yugoslavia, Serbia 602.

disease transmission, aging methods, *Diptera* 4493.

disease transmission, barley yellow dwarf virus, *Rhopalosiphum rufiabdominalis*

7649.

disease transmission, barley yellow dwarf virus, *Rhopalosiphum padi* 8468.

disease transmission, *Basidiomycetes* culture, *Verticillium fungicola*, *Megastelia*

halterata 5394.

disease transmission, bean curly dwarf mosaic virus, bean mild mosaic virus,

Coleoptera, Costa Rica 7658.

disease transmission, biological control, developing countries, *Insecta* 3666.

disease transmission, biological control, parasites, *Mermithidae*, *Culicidae* 3661

disease transmission, bovine leukemia virus, *Anopheles* 8432.

disease transmission, breeding, habitat, *Rhipicephalus appendiculatus*, Africa

3683.

disease transmission, cadang-cadang, check lists, *Insecta*, Philippines 3804

disease transmission, *Canis familiaris*, *Dirofilaria immitis*, *Aedes sierrensis*,

USA, California 6073.

disease transmission, *Carica papaya* necrosis, rhabdovirus, *Empoasca papayae* 7660.

disease transmission, cattle, *Ornithodoros coriaceus*, *Chlamydia* 8413

disease transmission, Colorado tick fever virus, *Dermacentor andersoni* 3655

disease transmission, cucumber mosaic virus, *Aphis gossypii*, *Myzus persicae*,

Israel 7657.

disease transmission, dengue virus, *Aedes albopictus*, Malaysia 4502.

Vectors, (continued)

disease transmission, *Dirofilaria immitis*, *Aedes vexans*, *Aedes sierrensis*, USA,

California 4494.

disease transmission, epidemiology, *Culicidae* 1373.

disease transmission, flight activity, settling behavior, *Rhopalosiphum padi*

3562.

disease transmission, historical account, *Arthropoda* 2929.

disease transmission, host preferences, *Aedes*, *Culex*, USA, Iowa 1198.

disease transmission, *Hyalomma anatolicum*, *Boophilus microplus*, India 2183.

disease transmission, Japanese encephalitis virus, *Culex pseudovishnui*, *Culex*

tritaeniorhynchus, *Culex bitaeniorhynchus*, India 2937

disease transmission, leaf-curl, *Cucurbita maxima*, *Bemisia tabaci* 7656

disease transmission, leishmaniasis, *Phlebotomus*, Kenya 1335.

disease transmission, life history, *Aedes africanus* 3687.

disease transmission, luteovirus, localization, salivary gland, *Myzus persicae*

8148.

disease transmission, maize sterile stunt virus, *Peregrinus maidis*, *Sogatella*

kolophona, *Sogatella longirostris* 7646.

disease transmission, malaria, *Anopheles*, Pakistan 2911.

disease transmission, *Mananellus*, *Culicoides furens*, *Culicoides barbosi*,

Haiti 4516.

disease transmission, medical importance, cimex 1354.

disease transmission, Nairobi sheep disease virus, *Rhipicephalus appendiculatus*

4511.

disease transmission, new records, sheep, *Babesia motasi*, *Haemaphysalis punctata*

4538.

disease transmission, O'nyong-nyong virus, isolation, *Anopheles funestus*, Kenya

1466.

disease transmission, *Oryza sativa*, *Laodelphax striatella* 1384.

disease transmission, *Phytonomus*, *Davidi*, *Pachybrachius bilobata* scutellatus 8363.

disease transmission, predators, biological control, *Toxorhynchites*, *Culex* 2861.

disease transmission, repellents, comparative studies, simuliidae, Brazil, Amazon

Basin 1364.

disease transmission, rice tungro virus, *Nephotettix virescens* 7661.

disease transmission, *Rickettsia prowazekii*, *Dermacentor variabilis*, experimental

infection 1322.

disease transmission, Ross River virus, *Aedes polynesiensis*, *Aedes aegypti* 3695.

disease transmission, Ross River virus, *Culex pipiens quinquefasciatus* 7632.

disease transmission, sanitation, tropical environment, *Culex pipiens* 1356.

disease transmission, sheep, Karai virus, *Rhipicephalus evertsi* 4512.

disease transmission, sorghum stunt mosaic virus, *Graminella sonora* 7659.

disease transmission, tomato spotted wilt virus, *Scirtothrips dorsalis*,

Frankliniella schultzei 6909.

disease transmission, tomato yellow leaf curl virus, *Bemisia tabaci* 7655.

disease transmission, *Trypanosoma cruzi*, *Triatoma sordida*, *Triatoma brasiliensis*,

Triatoma pseudomaculata, *Triatoma infestans*, *Panstrongylus megistus*, *Rhodnius*

nasutus, Brazil 5286.

disease transmission, tularemia, epidemiology, *Ixodes redikorzevi*, USSR,

Stavropol 9232.

disease transmission, vascular bacteriosis, check lists, *Xanthomonas manihoti*,

Manihot esculenta, *Insecta* 4528

disease transmission, venezuelan equine encephalitis virus, *Aedes aegypti* 4504.

diseases, *Musca domestica*, *Stomoxys calcitrans*, *Fannia canicularis*,

Drosophilidae, Germany, Fed. Rep. 632.

Dutch elm disease, biological control, *Scolytus multistriatus*, *Pseudomonas*

synnipse pathogenes 4526.

East coast fever, infection, *Rhipicephalus appendiculatus* 2181.

equine infectious anemia virus transmission, *Aedes sollicitans*, *Psorophora*

columbiae 1329.

eradication, disease control, *Simulium neavei*, *Onchocerca volvulus*, Kenya 1327.

filariasis, population levels, disease control, chemical control, DDT, *Anopheles*

farauti, *Guadaluana* 1357.

geographical distribution, *Trypanosoma brucei*, *Glossina tachinoides*, Togo 1326.

geographical distribution, yellow fever, *Aedes furcifer*, *Aedes taylori*, Gambia

3658.

Guama virus isolation, *Culicidae*, Surinam 3427.

hosts, Rocky Mountain spotted fever, *Mammalia*, *Acarina*, USA, California 1321.

infection, *Dirofilaria immitis*, *Aedes trivittatus*, *Aedes vexans*, USA, Indiana

9270.

infection rates, *Trypanosoma vivax*, *Glossina morsitans morsitans*, *Glossina*

morsitans centralis 8408.

infection susceptibility, *Plasmodium falciparum*, *Anopheles*, China, People's Rep.

639.

leishmaniasis, habitat, survival, *Psychodopygus intermedius* 9223.

livestock pathogens, theileriosis, *Rhipicephalus appendiculatus* 3657.

malaria, case reports, man, *Ixodes dammini*, USA, Minnesota 4492.

maize dwarf mosaic virus transmission, *Aphididae* 3806.

malaria, biological control, parasites, *Romanomermis culicivorax*, *Anopheles*

albimanus, El Salvador 7645.

malaria, control programs, reviews, *Culicidae* 8409

malaria, disease control, inhibition, fertilization, gametes, *Plasmodium*

gallinaceum 4483

malaria, disease control, pesticide resistance, reviews 644.

malaria, disease control, research programs, *Anopheles* 9267.

malaria, epidemiology, *Anopheles darlingi*, Brazil, Amazonas 5271

malaria, feeding behavior, blood meals, *Anopheles* dirus 6063

malaria, geographical distribution, *Anopheles arabiensis*, Niger 628

malaria, pesticide resistance, *Anopheles*, USSR 9438

malaria, population dynamics, *Anopheles aquasalis*, French Guiana 3689.

malaria, population genetics, *Plasmodium* susceptibility, *Anopheles* 7629

malaria transmission, chemical control, *Anopheles darlingi*, French Guyana 630

medical importance, disease transmission, yellow fever virus, *Haemagogus equinus*

1379.

medical importance, Getah virus, *Culex vishnui*, Philippines 1378

medical importance, role, enzyme-linked immunosorbent assay, *Insecta* 4092

Mycoplasma, *Ollarianus balli*, Jamaica 5892

myxomatosis, pest control, *Spilopsyllus cuculini*, *Oryctolagus cuniculus*,

Australia, New South Wales, Urana 7627

Onchocerca volvulus, rearing, *Simulium damnosum* 5058

onchocerciasis, biological control, pathogenic bacteria, *Bacillus thuringiensis*,

Simulium ochraceum, Guatemala 626.

onchocerciasis, breeding sites, recolonization, pest control, *Simulium damnosum*,

Ivory Coast 5269

onchocerciasis, chemical control, insecticides, larvae, *Simulium ornatum*,

Simulium equinum 5053

parasites detection methodology, *Trypanosoma rangeli*, *Rhodnius prolixus* 4486

Vectors, (continued)

- parasites development, sporozoites, *Babesia ovis*, *Rhipicephalus bursa* 5024.
parasites, *Mansonella ozzardi*, *Culicoides furens*, Haiti 656
parasites, medical importance, *Artemesia subulatus*, Malaysia 6057
parasites, mortality, reproduction, *Babesia bigemina*, *Boophilus decoloratus* 6025
parasites sexual reproduction, *Trypanosoma brucei*, *Glossina morsitans morsitans* 2631
parasites transmission, *Mansonella ozzardi*, *Culicoides varipennis* 3399
parasites transmission, *Onchocerca tarsiola*, Diptera 662
pathogens, *Amblyomma maculatum*, *Cowdria rumintum* 7639
pathogens, control, Culex pipiens, *Wuchereria bancrofti*, Africa 1316
pathogens, *Metatubaria anisopliae*, *Hylobius pales*, *Macrocheles*, *Histiogaster anisopliae* 6047
pathogens, parasites, *Macrocheles*, *Metatubaria anisopliae*, *Hylobius pales* 4207
pathogens survival, *Erwinia carotovora*, *Drosophila melanogaster*, *Drosophila busckii* 1446
pathogens transmission, *Babesia microti*, *Ixodes dammini* 635
pathogens transmission, *Theileria mutans*, *Amblyomma hebraeum*, South Africa 665
pathology, raspberry vein chlorosis virus, *Aphis idaei* 276
Phlebotomus, disease transmission, activity patterns, *Phlebotomus*, Yugoslavia 2766
plant diseases, abundance, Coccidae, *Pseudococcidae*, Ghana 1260
plant diseases, cassava mosaic virus, *Bemisia tabaci* 7653
plant diseases, mosaic disease, *Aphis gossypii* 7652
plant diseases, *Vetivellidella alacris*, *Orthotomicus oratus* 7648
plantations colonization, effects on disease control, *Trypanosoma*, *Glossina pallidipes*, Africa 1267
Plasmodium cynophylloides, *Anopheles quadrimaculatus*, *Anopheles freeborni* 5027
plum pox virus, flight activity, orchards, Aphididae 3835
poxvirus, disease transmission, *Culex nigripalpus*, *Wyeomyia vanduzeei* 3697
Quarantini virus, isolation, characterization, *Nephotettix dumetariae*, Kuwait 5270
rabies virus, *Vulpes*, *Phloeoxodes benagopus*, *Phloeoxodes canisuga* 8414
rearing, culture systems, colonization, *Oeciacus vicarius* 3692
rice ragged stunt virus, detection, enzyme-linked immunosorbent assay, *Nilaparvata lugens* 8149
rice ragged stunt virus, infection, *Nilaparvata lugens* 7376
rice tungro virus, crop fields, *Oryza sativa*, *Nephotettix virescens* 7647
salmonellosis, urban environment, man, Insecta 6885
soybean mosaic virus, landing behavior, Aphididae, *Glycine* man 3825
Spiroplasma citri, development, distribution, *Scaphytopius nitridus* 8220
tick-borne encephalitis, pest control, DDT, *Ixodes persulcatus*, USSR 9253
tick-borne encephalitis virus, pest control, acaricides, *Ixodes persulcatus* 9252
tick-borne encephalitis virus, survival, disease transmission, *Haemaphysalis inermis*, *Microtus* 4491
transmission (transovarial), *St. Louis* encephalitis, *Culex pipiens* 634
Trypanosoma cruzi, disease reservoirs, habitat, *Triatoma arizonae*, Brazil, Minas Gerais State 5283
Trypanosoma vivax transmission, *Glossina morsitans morsitans*, *Glossina morsitans centralis* 3681
trypanosomiasis, pathogens, continuous culture, *Trypanosoma brucei brucei*, *Glossina morsitans* 8419
vector-borne diseases, host preferences, food preferences, oviposition, dispersion, feeding behavior, *Scaphytopius acutus*, *Prunus persica*, *Trifolium pratense* 526
Venezuelan equine encephalitis virus, pathogens dose, *Culex taeniorhynchus* 3400
viruses, disease control, oia, crop fields, Aphididae 7697
viruses, feeding, host plants, methodology, cages, Aphididae 7253
viruses, population levels seasonal variations, *Bemisia tabaci* 57
visceral leishmaniasis, breeding, life cycle, *Phlebotomus martinii*, Kenya 8286
wood, attractant comparison, *Scolytus multistriatus*, *Ulmus procera* 2062
yellows, Beta vulgaris, *Aphis craccivora*, *Aulacorthum solani*, *Macrosiphum euphorbiae*, *Myzus persicae*, Tasmania 6097
- Vegetables,**
crop fields, biological control, parasitism, *Pediobius foveolatus*, *Epilachna varivestis* 2032
crop protection, pest resistance, Insecta 3017
Cucumis sativus, immature stages, population density, *Diaphania nitidalis* 597
pest control, chemical control, larvae, *Leptodiptera* 3744
pest control, chemical control, *Listronotus oronotus*, USA, Ohio 2973
- Vegetation,**
effects on soil fauna, *Cryptostigmatidae* community structure, India, West Bengal, Santiketan 4442
nest building (non-reproductive), colonies, *Myrmica sabuleti*, *Myrmica scabrinodis*, British Isles, England 8588
paleoecology, environmental changes, species composition, *Coleoptera*, USA, New York, Lockport 7127
semi-arid environments, savannahs, soil fertility, *Macrotermes michaelsoni* 5988
- Vegetation patterns,**
community composition, population density, *Coccinellidae* 9191
community composition, succession, construction disturbance effects on, *Arthropoda* 1284
crop fields, effects on community composition, Insecta 2888
effects on dispersal, *Glossina morsitans* 2784
effects on host plants herbivory susceptibility, *Aristolochia reticulata*, *Battus philenor* 2072
forests, succession, community composition, *Araneae* 9180
geographical distribution, water management effects on, disease transmission, *African trypanosomiasis*, *Glossina* 1344
grasslands, larvae feeding behavior effects on, *Hyles lineata* 543
habitat selection, grasslands, *Orthoptera*, USA, Texas 6853
orchards, effects on vectors abundance, *X* disease, *Cicadellidae* 3836
rangelands, outbreaks, population density, species diversity, *Acrididae*, USA, Arizona 6050
- Velas,**
wings, terminology, *Ephippiginae* 72
- Velarifictorus,**
pest outbreaks, India, Meghalaya 7694
- Velia sinensis,**
new species, taxonomy, morphology 4014
- Vellinae,**
taxonomy, morphology, new genera, new species 4014
- Velocity,**
flight activity, energetics, *Locusta migratoria migratoroides* 8062
flight activity, wing-beat frequency, *Locusta migratoria* 2522
- Venation,**
wings, comparative studies, *Coleoptera* 73

Venation, (continued)

- wings, malformations, *Cespa*, India 6509
wings, *Orthetrum triangulare triangulare* 6512
- Venezuelan equine encephalitis virus,**
disease transmission, blood meals, *Aedes aegypti* 4504
- Venezuela,**
disease transmission, *Carica papaya* necrosis, *rhabdovirus*, *Empoasca papayae* 7660
new species, new genera, new records, *Tepidococcus brewieri*, *Tropisternus jolyi*, *Rhantus elegans* 3184
new species, new genera, taxonomy, morphology, *Trichalodion penicillum* 4780
new species, taxonomic revision, synonymy, *Pentastoma* 4764
new species, taxonomy, morphology, *Anastrepha reichardi* 8790
new species, taxonomy, morphology, *Dichelacera flavicosta* 3202
new species, taxonomy, morphology, *Paraschoenastia magnatarsala* 8727
new species, taxonomy, morphology, *Prostolius martinezi* 6368
new species, taxonomy, morphology, *Tramea rustica*, *Tramea minuta* 8000
pests, economic importance, morphology, developmental stages, *Pieris arpa* 2777
- Venezuela, Valencia L.,**
benthos, community composition, *Ephemeroptera*, Diptera 621
- Venezuelan equine encephalitis virus,**
dose, disease transmission vectors, *Culex taeniorhynchus* 3400
infection, disease resistance, *Culex taeniorhynchus* 9001
infection, immunization, sensitivity, mice, *Aedes aegypti* 7626
- Venilia longina,**
taxonomy, new species, morphology, keys 5
- Venson,**
adoption, purification, characterization, *Apidae* 8181
antigenic characteristics, *Apis mellifera* 1366
antigenic characteristics, comparative studies, *Vespa maculifrons*, *Vespa squamosa*, *Vespa crabro* 1365
biochemical analysis, *Phaninus triangulum* 4215
bites, medical importance, *Araneae*, Europe 5287
bites, treatment, *Latreutes* 1319
Buthus judacius, toxicity, *Sarcophaga falcata*, *Locusta migratoria* 5054
chemical analysis, mass spectrometry, *Parasitaphys vulgaris* 248
effects on blood coagulation, rabbits, man, *Loroseles laeta* 8195
effects on hippocampus electrical properties, guinea-pigs, *Latreutes hesperus* 8184
effects on intracellular pressure, *Leporidae*, *Hymenoptera* 6884
effects on neurophysiology, *Penapleia americana*, *Phaninus triangulum* 4217
effects on *Schistocerca gregaria* muscles, glutamate, uptake, *Phaninus triangulum* 3768
extraction, methodology, *Apis mellifera* 2180
glands, morphology, cytochemistry, *Buthus famulus* 8981
hyperparasitism, paralysis, *Aphidius smithi*, *Asaphes lucens* 2820
hypersensitivity (immediate), immunotherapy, man, *Hymenoptera* 4484
hypersensitivity (immediate), immunotherapy, man, *Hymenoptera* 9254
hypersensitivity (immediate), man, immunotherapy, *Hymenoptera* 3700
hypersensitivity, population studies, man, *Apidae*, Australia 9266
immune response, man, *Hymenoptera* 1325
immune response, man, reviews, *Arthropoda* 5764
induction, prapism, man, *Latreutes mactans* 7395
man hypersensitivity (immediate), hypersensitivity, *Apis* 6053
melting, pH effects on conformation, C. D., venom 4206
Mossambica, *Mossambica*, toxicity, enzymatic activity effects on, *Arthropoda* 1057
odynophagia, dysphagia, man, stings, *Vespa* 8177
parasites, effects on hosts development, *Hymenoptera* 502
parasitoids, eggs encapsulation, hosts, *Pieris rapae crucivora*, *Apanteles glomeratus* 8325
peptide synthesis, nucleotide sequence, *Vespa* 961
phospholipase A₂, queens, workers, *Apis mellifera* 3431
poisoning, man, *Araneae*, *Scorpiones*, *Hymenoptera* 8183
protein composition, *Vespa mandarinia* 2665
proteins, biochemical analysis, *Heterometrus scaber* 4178
proteins, biochemical analysis, *Polistes comanchus navajo*, *Vespa orientalis* 4231
proteins, toxins, biochemical analysis, *Heterometrus scaber* 4179
Scorpiones, venomation, case surveys, Tunisia, man 8417
sensitivity, man, *Hymenoptera* 3677
sensitivity, man, immunotherapy, case reports, Insecta 3686
stings, immunoglobulin E, man, *Hymenoptera* 3699
toxicity, *Apis mellifera* 5041
toxicity, bioassays, *Atropa* 1082
toxicity, *Heterometrus scaber* 2182
toxicity, neurons, mechanoreceptors, neuromuscular junctions, *Crustacea*, *Latreutes mactans* 9017
toxicity, rats, *Lenurus quinquestratus* 8193
toxicity, sensitivity, man, reviews, *Apidae* 6616
toxins, *Buthus judacius*, effects on action potential, sodium currents, axons, *Penapleia* 8182
toxins, proteinase activity effects on skin, man, *Euproctis subflava*, *Euproctis chrysorhoa* 8178
- Venom gland,**
anatomy, *Brachionidae* 8113
foaming, defense mechanisms, *Pachycondyla* 476
skeleton, morphology, *Andrenidae* 93
tail pheromone, 3-ethyl-2,5-dimethylpyrazine, *Myrmica rubra* 6576
- Ventidius sushme,**
new species, taxonomy, morphology, India, West Bengal 7195
- Ventilation,**
abdomen, motor activity, peristalsis, *Culicidae* 5661
spiracles, neurons, coordination, thorax, *Locusta migratoria* 5665
- Ventilatory behavior,**
diel variations, temperature effects on, *Erythemis simplicicollis* 5876
- Venturia canescens,**
parasitoids, intraspecific relationships, competition, effects on host searching behavior 3652
- Venturia inaequalis,**
pest resistance, genes, *Panonychus ulmi* susceptibility, *Malus* 6204
- Verbenone,**
effects on aggregation pheromone inhibition, *Ips typographus* 7336
- Vernonia patens,**
defoliation, food selection, *Percopsis leucophaea*, Costa Rica 5164

- Veromessor liversi**, anatomy, gastrointestinal tract, air sacs 4149.
- Veromessor pergandei**, feeding behavior, food preferences, seeds 2805.
foraging behavior, predator-prey interactions, *Phrynosoma platyrhinos*, USA, Nevada 2145.
- Verrucocontomium mixtum**, new species, taxonomy, morphology, USA, Alaska 4062.
- Vertagopus brevicaudus**, morphology, redescription, Canada 7272.
- Vertagopus reuteri**, morphology, redescription, USSR, Siberia 7272.
- Vertical distribution**, abundance, plantations, Fulgoroidea, USA, North Carolina 1313.
altitude, pests, crops, Brassica, Insecta, India, Meghalaya 7687.
altitudes, enzymes, polymorphism, coloration, *Elaphrus americanus*, North America, Pacific Northwest 9217.
geotaxis, phototaxis, *Drosophila* 2750.
pests, stored products, factors affecting, *Oryzaephilus sunnensis*, *Sitophilus oryzae*, *Rhyzopertha dominica* 1445.
predation effects on, *Aclius semiscutatus*, *Daphnia pulex* 5438.
seasonal variations, annual cycles, *Labidostomum luteum*, France 7803.
Solanium, *Myzus persicae* 1234.
- Vertical migrations**, diel activity, spatial distribution, host plants, *Acyrtosiphon gossypii* 6717.
larvae, phototaxis, *Chaoborus* 3619.
- Verticillium**, pathogens, infection, *Lymantria dispar* 5741.
- Verticillium fungicola**, vectors, disease transmission, Basidiomycetes culture, *Megaselia halterata* 5394.
- Verticillium lecanii**, biological control, pathogens, fungi, culture methodology, environmental conditions 4920.
biological control pathogens, storage, Insecta 2217.
pathogens, biological control, *Trialeurodes vaporariorum*, *Aphis gossypii* 8577.
pathogens, infection, *Cecidophorus ribis*, British Isles 1811.
pathogens, mortality, *Synanthedon salicis*, New Zealand 4415.
pathogens, pest control, *Trialeurodes vaporariorum* 4623.
- Vesicles**, coxal vesicles, water absorption, *Tomocerus*, *Orchesella villosa* 3365.
- Vespa affinis**, nests, social behavior, Thailand 2281.
- Vespa crabro**, venom, antigenic characteristics 1365.
- Vespa mandarinia**, venom: protein composition 2665.
- Vespa orientalis**, cuticle, electrical properties, temperature effects 4118.
proteins, venom, biochemical analysis 4231.
social behavior, colonies, imprinting, attachment, queens 745.
thermoregulation, cuticle, electrical properties, temperature effects, diets 3272.
xanthines, colchicine, effects on longevity, photoconduction, pigments, cuticle 4948.
- Vespidae**, interspecific relationships, competition, effects on *Chauliognathus pennsylvanicus* mate selection 1142.
occurrence, *Polistes gallicus*, Belgium 9484.
parasitoids, pest control, biological control, Diptera 9322.
sex ratio, foraging behavior optimization 6819.
stings, hemolytic anemia, case reports, man 9231.
stings, odynophagia, dysphagia, man 8177.
venom, peptide synthesis, nucleotide sequence 961.
ventral nerve cord anatomy 8916.
- Vespineae**, colonial characteristics, comb construction 3842.
- Vespoidea**, classification systems, taxonomy, phylogeny 4873.
- Vespa**, venom, immune response, man 1325.
- Vespa consobrina**, nesting behavior, colonial characteristics, activity patterns 6220.
nesting behavior, colonies, site selection, flight activity 9357.
queens, nesting behavior, nest building 9364.
- Vespa germanica**, colonies, nests development 8592.
geographical distribution, occurrence, Canada, Manitoba 3931.
population establishment, abundance, urban environments, USA, New Jersey 9200.
population establishment, abundance, USA, New Jersey 6326.
queens, nest building, culture, laboratories 1983.
- Vespa maculifrons**, colonial characteristics, communication, vibratory stimuli 4645.
colonies, nests development 8592.
nesting, colonial characteristics, population dynamics 6988.
population establishment, abundance, urban environments, USA, New Jersey 9200.
population establishment, abundance, USA, New Jersey 6326.
queens, nest building, culture, laboratories 1983.
queens, nesting behavior, nest building 9364.
venom, antigenic characteristics 1365.
- Vespa pennsylvanica**, population dynamics, annual variations, environmental factors, Pacific Ocean, Northwest 1268.
- Vespa squamosa**, overwintering colonies, morphology, castes 4644.
venom, antigenic characteristics 1365.
- Vespa vidua**, colonies, nests development 8592.
geographical distribution, occurrence, Canada, Manitoba 3931.
queens, nest building, culture, laboratories 1983.
- Vespa vulgaris**, colonial characteristics, communication, vibratory stimuli 4645.
colonies, nests development 8592.
foraging behavior, nectar reinforcement effects on 2049.
population dynamics, annual variations, environmental factors, Pacific Ocean, Northwest 1268.
queens, nest building, culture, laboratories 1983.
- Vespa vulgaris**, (continued)
queens, nesting behavior, nest building 9364.
- Veticicliadella alacris**, plant diseases, vectors, *Orthotomicus erosus* 7648.
- Viability**, artificial insemination, semen, storage, freezing, nitrogen, *Apis mellifera* 1877.
epistasis effects on, fitness, *Drosophila melanogaster* 2318.
hybridization, *Anopheles minimus*, *Anopheles aconitus* 4691.
mycotoxins, effects on, *Drosophila melanogaster* 4212.
seeds, *Sorghum vulgare*, chemical control, pests, *Atherigona* 7782.
sex ratio, population genetics, x chromosome, *Drosophila melanogaster* 5499.
- Vianodes**, taxonomy, synonymy, *Estenorhynchus* 8774.
- Vibrations**, leaves, communication, *Cupienius* salei 3542.
webs, transmission, *Araneae* 5913.
- Vibratory stimuli**, communication, colonial characteristics, *Vespa vulgaris*, *Vespa maculifrons* 4645.
communication, surface water, aquatic animals, reviews, *Gerridae* 5868.
mechanoreceptors, neurophysiology, *Locusta migratoria*, *Decticus verrucivorus* 3298.
physical activity, behavior response, *Argiope aurantia* 4320.
role, mating behavior, courtship, *Chrysopa* perla 4301.
- Vicia faba**, association, abundance, *Liriomyza huidobrensis*, Argentina 6704.
food plants, substrate preferences, feeding, *Aphis fabae*, *Acyrtosiphon pisum* 5925.
host plants, bean yellow mosaic virus, disease transmission, *Myzus persicae*, *Aphis fabae* 3707.
pests infestation prediction, *Aphis fabae* 2969.
- Vichoperla zipha**, synonymy, *Peltopera ada* 6458.
- Vietnam**, new records, *Seromyia pendleburyi* 7964.
new species, taxonomy, morphology, *Agotocera sokolovi* 6383.
- Vigna unguiculata**, crop fields, population dynamics, *Empoasca Kraemeri*, Brazil 6044.
- Vigna aconitifolia**, host plants, pest control, *Azadirachta indica* extracts, repellents, *Amsacta moorei* 6923.
- Vigna mungo**, flour, effects on growth, development, *Callosobruchus chinensis* 7763.
host plants, pest resistance, *Callosobruchus chinensis* 7766.
- Vigna sesquipedalis**, photosynthesis, parasites effects on, *Aphis craccivora* 524.
yield, parasites effects on, *Aphis craccivora* 529.
- Vigna sinensis**, host plants, pests, population regulation, predators, *Aphis craccivora* 9188.
- Vigna unguiculata**, crop fields, pest control, oils, *Callosobruchus chinensis* 2261.
crop yield, pests effects on, *Nezara viridula*, *Leptoglossus phyllopus* 3769.
cultivars, resistance, pests, *Lygus lineolaris*, *Anticarsia gemmatilis*, *Nezara viridula*, *Chalocodermus aeneus*, *Aphis* 4614.
host plants, oviposition, habitat preferences, *Maruca testalis* 8349.
host plants, pest resistance, cultivars, Insecta 8522.
infestation, phenology, *Maruca testalis* 2052.
pest control, insecticides, yield, *Chalocodermus aeneus* 8540.
pest resistance, host plants, screening, *Maruca testalis* 3721.
yield, agricultural practices, pest control, Insecta 8520.
- Vigna unguiculata**, yield, damage, larvae feeding, *Nezara viridula* 2235.
- Viguiera porteri**, host plants, pest resistance, *Empoasca abrupta* 2090.
- Villa brunnea**, host-parasite interactions, parasitism intensity 2035.
- Vineyards**, life history, population dynamics, *Pseudococcus longispinus*, New Zealand 459.
- Virions**, salivary gland, *Triatoma infestans* 3421.
- Viroids**, vectors, disease transmission, cadang-cadang, Insecta, Philippines 3804.
- Virulence**, *Autographa californica* nuclear polyhedrosis virus, diets, methoprene, pest control, *Heliothis virescens* 6967.
dengue virus, cell lines, *Toxorhynchites amboinensis* 7388.
nuclear polyhedrosis virus, mortality, *Anticarsia gemmatilis*, *Pseudoplusia includens* 1826.
nuclear polyhedrosis virus, rearing, biological control, Insecta 3828.
pathogenesis, fungi, Insecta 7368.
pathogenicity, geographical variations, *Metarhizium anisopliae*, *Culex pipiens pipiens* 8161.
pathogens, *Autographa californica* nuclear polyhedrosis virus, *Trichoplusia ni* 3417.
pathogens, Microsporidia, *Aedes aegypti* 8127.
pathogens, mutants, enzymes, cell surface, *Pseudomonas aeruginosa*, *Galleria mellonella* 4198.
proteinase, cell surface mutants, *Pseudomonas aeruginosa*, *Galleria mellonella* 5738.
rabies virus, disease reservoirs, *Phlebotomus rugicollis*, *Mustela* 7633.
- Virus-like particles**, infection, salivary gland hypertrophy, *Glossina pallidipes*, Kenya 8141.
new records, nuclei, *Amyelois transiella* 5739.
transmission, feeding, *Glossina pallidipes* 8140.
- Viruses**, antigenic characteristics, isolates, *Nudarelia cytherea capensis* 5748.
characterization, biological control, Insecta 8147.
characterization, isolation, blood, *Ceratomyia trifurcata*, *Diabrotica undecimpunctata* 1824.
disease transmission, deltamethrin effects on, *Myzus persicae* 6954.
disease transmission, flight activity, settling behavior, *Rhopalosiphum padi* 3562.
disease transmission, host plants, repellents effects on, *Myzus persicae* 6979.
disease transmission, *Oryza sativa*, *Laodelphax striatella* 1384.
diseases, pathogenesis, books, Insecta 7920.
factors affecting population decline, pest outbreaks, *Mythimna separata*, India

Subject Index

Viruses, (continued)

- 5301
granulosis virus, disease resistance, genetics, *Phthoriniae operculata* 6239
granulosis virus, infection, *Pericallia ricini*, pathology, larvae, body weight 1805
iridovirus, replication, isolates, *Armadillidium*, *Lepidoptera* 5745
isolation, *Culex*, Israel 3690
isolation, DNA characterization, *Campoplex sonorensis* 8122
isolation, *Ixodes uriae*, France, Brittany 4188
morphology, characterization, isolation, *Panonychus citri* 8142
mosaic disease, plant diseases, vectors, *Aphis gossypii* 7652
nuclear polyhedrosis virus, infection, cytopathology, *Pseudaletia unipuncta* 5744
nuclear polyhedrosis virus, infection susceptibility, *Heliothis* zea, *Spodoptera frugiperda* 5746
nuclear polyhedrosis virus, maintenance, attenuation, cell culture, *Heliothis* zea 5743
nuclear polyhedrosis virus, pathology, effects on, larvae, *Philosamia ricine*, *Mythimna separata* 1813
pathogens, physicochemical properties, *Apis mellifera* 1033
pathogens, *Teleogryllus commodus*, Australia, Victoria 1003
pathology, larvae, *Ameloylo transiella* 267
pest control, development, biological control 5392
pest control, forest management, *Insecta* 1386
plant diseases, epidemiology, *Oryza sativa*, *Insecta* 9275
replication, media (culture), TC-199-MK, cell lines, *Insecta* 8852
replication, reviews, *Insecta* 8990
sacbrood virus, antigenic characteristics, isolates, *Apis cerana*, Thailand 5727
susceptibility, *Aedes albopictus* 8986
transmission, *Aphididae* 4195
transmission, *Rhopalosiphum padi* 2178
vectors, disease control, oils, crop fields, *Aphididae* 7697
vectors, feeding, host plants, methodology, cages, *Aphididae* 7253
vectors, population levels seasonal variations, *Bemisia tabaci* 576
- Visceral leishmaniasis**
vectors, breeding, life cycle, *Phlebotomus martini*, Kenya 8286
- Vision**
comparative studies, *Apis mellifera*, *Bombus hortorum* 904
compound eyes, migrabions, pigments, light intensity, *Insecta* 4139
dark culture effects on, *Drosophila melanogaster* 131
eye, bioluminescence, *Photinus pyralis* 132
pheromones, effects on mating behavior, *Heliothis* zea 4291
predatory behavior, predatory aggression, literature reviews, *Salicidae* 3569
visual perception, *Musca domestica* 140
- Visual communication**
bioluminescence, courtship, *Photinus luciferens* 5848
central nervous system organization effects on, *Photinus versicolor* 265
dialects, foraging behavior, range, *Apis mellifera carnica*, *Apis mellifera ligustica* 5118
stereotyped behavior, conspecifics, *Reticulitermes* 413
- Visual discrimination color**, *Apis mellifera* 3301
color brightness, light intensity, achromatic vision, *Apis mellifera carnica* 4973
color, light intensity, brightness discrimination learning, achromatic vision, *Apis mellifera carnica* 4974
display, distance, conspecifics, *Portia fimbriata* 5668
neurons, *Musca domestica* 140
sex, sexual dimorphism, *Pieris protodice* 7496
visual perception, locomotion, walking, *Drosophila melanogaster* 906
wavelength, photoreceptors, filters, *Phalaena* 8920
- Visual discrimination learning**
color, flowers, cross-pollination, *Apis mellifera* 9083
color, forms, light intensity, *Apis mellifera adansonii*, *Melipona quadrifasciata*
anthidioids, *Melipona rufiventris* 5123
memory, deficient mutant, *Drosophila melanogaster* 5122
- Visual evoked response**
head movements, nystagmus, *Tenebrio molitor* 151
orientation, eye, *Musca domestica* 135
visual stimuli, hosts, attractants, avoidance behavior, *Mansonella*, *Anopheles ziemanni* 1919
- Visual perception**
antennae tracking, *Gryllus campestris* 2534
compound eyes, optical properties, *Apis mellifera* 144
eye color mutants, *Drosophila melanogaster* mating behavior, *Drosophila melanogaster* 1135
functional morphology, photoreceptors, anterior median eye, *Plexippus* 4971
histology, physiology, eye, *Bombus hortorum* 904
landing behavior, habituation, *Drosophila melanogaster* 1156
light intensity, compound eyes, electrophysiological recording, *Lepidoptera* 7300
light, polarization, ultrastructure, ommatidia, *Calliphora erythrocephala* 4967
motion, neurophysiology, *Phormia terraeenovae*, motion, visual perception, neurophysiology, *Phormia terraeenovae* 7304
motor activity, neurophysiology, flight, *Drosophila melanogaster* 6683
movements, neurons, neurophysiology, *Musca domestica* 7303
neurons, *Musca domestica* 140
ocelli neurons, effects on orientation, *Schistocerca americana* gregaria 909
orientation, flight activity, *Musca domestica* 1155
tracking, 908
tracking, orientation, mathematics, *Musca domestica* 412
tracking, oscillations, *Musca domestica* 912
visual discrimination, locomotion, walking, *Drosophila melanogaster* 906
visual preferences, conditioning, *Acheta domestica* 7500
visual stimuli, flight, *Musca domestica* 907
- Visual perception**
orientation, color, light, *Trialetodes vaporariorum* 8265
- Visual preferences**
visual perception, conditioning, *Acheta domestica* 7500
- Visual stimuli**
attractants, field trials, pest control, *Rhagoletis pomonella* 4583
chemical stimuli, attractancy, pest control, *Rhagoletis pomonella*, *Malus* 8500
color matching, substrate preferences, polymorphism, *Circotettix rubra rubra* 4318
compound eyes, optomotor response, flight activity, *Apis mellifera* 4981
effects on cardiovascular system physiology, *Calliphora vomitoria* 4146
effects on host searching behavior, hosts coloration, *Diptera*, *Equus zebra* 2130
effects on host searching behavior, *Podococcus syringae* 2248

Visual stimuli, (continued)

- feeding behavior, host plants, *Synanthedon pictipes* 5929
flight, sex pheromone, chemotaxis, *Grapholitha molesta*, *Heliothis virescens* 5843
host searching behavior, feeding behavior, *Glossina* 1201
landing behavior, orientation, *Scaptomyza selenis* 1926
learning behavior, memory, population characteristics, *Drosophila* 2764
light, oviposition, substrate preferences, *Aedes vexans* 5077
light polarization, role, navigation behavior, *Corisae* 2857
mating behavior role, *Heliothis* zea 8253
mutants, phototaxis, courtship, *Drosophila melanogaster* 4689
olfaction, host searching behavior, *Glossina* 1202
orientation, flight, *Drosophila* hyde 5864
predatory behavior, molting, *Ranatra linearis* 8295
retina; landing behavior, *Musca domestica* 7298
role, mating behavior, deserts, *Drosophila* 2737
traps, efficacy, *Laromyia triflori*, *Laromyia sativae* 2195
visual evoked response, hosts, avoidance behavior, attractants, *Mansonella*, *Anopheles ziemanni* 1919
visual perception, flight, *Musca domestica* 907
- Vitamin A**
photoreceptors, mutation, rhodopsin, *Drosophila melanogaster* 1740
- Vitamin B**
biomethylation, gastrointestinal tract, larvae, *Phoracantha semipunctata* 941
- Vitamin deficiencies**
nibblin, effects on parasitism susceptibility, *Polypath spinulosa*, *Rattus rattus* 6779
- Vitamins**
nutrient requirements, cell lines, *Planaria americana* 877
pyridoxine, nutrient deficiencies, survival, development, larvae, *Heliothis virescens* 1744
- Vitelin**
biochemical characteristics, amino acid composition, *Leucophaea maderae* 6552
biochemical characteristics, *Insecta* 6549
biosynthesis, fat body, *Calliphora erythrocephala* 6550
incorporation, oogenesis, *Locusta migratoria migratoriolides* 1887
purification, characterization, *Calliphora vicina* 177
- Vitellogenesis**
protein biosynthesis, *Hyalophora cecropia*, *Tenebrio molitor*, *Aedes aegypti* 7313
- Vitellogenesis**
ablation, medial neurosecretory cells, *Eurygaster eglicipes* 6590
bioaccumulation, lipids, oocytes, *Locusta migratoria* 395
blood meals, hormones, *Culex* 5083
brain centers, surgery, effects on, *Labridia nana* 479
corpora allata, biosynthesis, juvenile hormones, *Locusta migratoria* 2714
corpora allata, diapause, females, *Tetrix undulata* 3481
ecdysone, oogenesis, *Aedes aegypti* 5185
effects on host searching behavior, inhibition, *Aedes aegypti* 2807
farnesol effects on, *Labridia nana* 1118
farnesol effects on, *Labridia nana* 5079
fat body, juvenile hormones, *Locusta migratoria* 1775
feedback inhibition, ovaries, *Aedes aegypti* *Aedes atropalpus* 327
follicle junctions development, *Rhodnius prolixus* 1130
hormones effects on, *Rhodnius prolixus* 3513
20-hydroxyecdysone, effects on *Aedes aegypti* 3491
immunohistochemistry, antibodies, proteins distribution, *Locusta migratoria* 1133
inhibition, malikistone A effects on, *Oncopeltus fasciatus* 3487
juvenile hormones effects on, *Kaloterpes flavoscutellatus* 4280
melting, juvenile hormones, fat body ultrastructure, *Sarcophaga bullata* 2721
neuroendocrine system, *Aedes aegypti*, *Aedes taeniorhynchus* 5832
oocytes development, *Jonespeltis splendens* 9061
oocytes, proteins adsorption, *Locusta* 2715
oogenesis, histology, *Lucilia cuprina* 2668
oogenesis, temperature-sensitive mutant, *Drosophila melanogaster* 2334
protein biosynthesis induction, polyribosomes, juvenile hormones, *Locusta migratoria* 190
protein biosynthesis, *Thermobia domestica* 6656
regulation, genetic factors, hormones, *Drosophila* 5095
role, ecdysone, *Culex* 3499
role, endocrine glands, ultrastructure, *Boophilus microplus* 989
role, 20-hydroxyecdysone 3511
sex determination, mutants, *Drosophila melanogaster* 6268
ultrastructure, histochemistry, *Atta* 5066
- Vitellogenesis**
biosynthesis, fat body, *Calliphora erythrocephala* 6550
fat body, oogenesis, proteins, *Diploptera punctata* 1884
genes, transcription, juvenile hormones stimulation, fat body, *Locusta migratoria* 6569
incorporation, oogenesis, *Locusta migratoria migratoriolides* 1887
protein biosynthesis, fat body, *Locusta migratoria* 8942
purification, characterization, *Calliphora vicina* 177
- Vitellogenesis**
protein biosynthesis, *Hyalophora cecropia*, *Tenebrio molitor*, *Aedes aegypti* 7313.
- Vitex negundo**
hosts, parasites, new species, *Tegolophis vitis*, India, West Bengal 3969.
- Vitis**
host plants, pest resistance, *Daktulosphaira vitifoliae* 9289
- Vitula edmandae**
pests, epiphytic, larvae effects on colonies damage, *Apis mellifera* 1419.
- Vocalization**
defensive behavior, predators, *Cymna tenera*, *Chiroptera* 5914.
- Volatiles**
attractants, parasites, *Eucelatoria*, *Heliothis virescens*, *Spodoptera eridania*, *Estigmene acrea* 4321
biochemical analysis, *Notonecta ectatomoides*, *Polytrichia* 4995
catching methods, attractants, traps, *Allium cepa*, *Hylemyia aquida* 421
chemotaxis, dehydration, water content, effects on, olfactory perception, cages, *Eucelatoria*, *Hibiscus esculentus* 432
defense secretions, *Dufour's* gland, *Andrenidae*, *North America* 245
effects on oviposition, oogenesis, *Zea mays*, *Sitotroga cerealella* 4270
host plants, chemoreception, pollution effects, sulfur dioxide, pests, *Insecta* 5132
pheromones, chemical analysis, *Apis mellifera* 8116
sex pheromone, chemical composition, *Dacus oleae* 8096.
- Volcanic environment**
ashes effects on insecticides degradation, chemical control, *Laspeyresia pomonella*, USA, Washington 3785

- cellulites**, chemical composition, defense secretions, Dufour's gland, Rhytidoponera metallica, Australia 246.
- oria ruralis**, parasitoids, nuclear polyhedrosis virus infection effects on, Trichoplusia ni 2036
- ulpes**, disease transmission, rabies virus, Phlebotomus hexagonus, Phlebotomus canisuga 8414
- ulpes ulpes**, Susceptibility, disease transmission, parasites, Sarcoptes scabiei 1331.
- Valchia tianguangshanensis**, new species, rats parasites, China, People's Rep. 7.
- Valchiella impar**, geographical distribution, parasites, Philippines 794.
- Valchiella oudemansi**, geographical distribution, parasites, Philippines 794
- Valking**, comparison, Trochosa ruficollis, Lycosa tarentula 887.
- coordination**, Phasmatidae 115.
- escape behavior**, mechanical stimuli discrimination, wind, Periplaneta americana 2752.
- escape behavior**, neurophysiology, Periplaneta americana 2529
- locomotion**, visual discrimination, visual perception, Drosophila melanogaster 906
- Walls**, urban environment, habitat preferences, nesting, Megachilidae, British Isles 1182
- Vandesia polyseta**, new species, taxonomy, morphology 6345.
- Varburgia**, host plants, antifeedants, Spodoptera exempta, Spodoptera litoralis 2842.
- Varramaba virgo**, meiosis, parthenogenesis, hybrids 5460.
- Wastewater treatment**, ponds, species composition, Culicidae, USA, Florida, Indian River Co. 6045.
- Water**, absorption, solutes concentration, frontal bodies, Arenivaga 7352.
- absorption**, vesicles, epithelium, Tomocerus, Orchesella villosa 3365.
- vapors adsorption**, water balance, Arenivaga investigata 1793.
- vapors adsorption**, water balance, Psocoptera 3366.
- water availability**, limiting factors, distribution, arid zones, Hemilepistus aphganicus, Hemilepistus reaumuri 2606
- Water balance**, arid zones, Hemilepistus aphganicus, Hemilepistus reaumuri 2606
- dehydration survival**, osmoregulation, Tenebrio 236.
- eggs**, ultrastructure, Acanthoscelides obtectus 2499.
- fat metabolism**, body weight, molting, Nauphoeta cinerea 7324.
- flight**, hemolymph, diuresis, Rhodnius prolixus 7351.
- metamorphosis**, pupation, Manduca sexta 7353.
- osmoregulation**, drought tolerance, Onymacris unguicularis 8104.
- osmoregulation**, excretion, Periplaneta americana 5011.
- temperature effects**, Dermatophagoides farinae 2605
- vapors adsorption**, frontal bodies role, Arenivaga investigata 977.
- water requirements**, effects on habitat selection, Orchesella cincta, Tomocerus minor 2604
- water vapors adsorption**, Arenivaga investigata 1793.
- water vapors adsorption**, Psocoptera 3366.
- Water chemistry**, population dynamics, Aedes 9376.
- Water content**, effects on spermatophores, deposition, Pelokylla malabarica 1875
- environmental effects**, food consumption, wood, pests, Hyalotrupes kajulus 2000
- food plants**, feeding behavior, food preferences, Atta colombica 2005.
- Water currents**, streams, functional morphology, laser doppler anemometry, benthos, Ecdyonurus venosus 7026
- Water intake**, drinking behavior, castes, Macrotermes michaelsoni 5918.
- Water levels**, effects on Simuliidae control, rivers, South Africa 669.
- emergence**, Culiceta melanura, Culiceta morsitans, USA, New York, Toad Harbor Swamp 6875
- Water loss**, cuticular permeability, Lycosa howarthi, USA, Hawaii 2607
- herbivory**, Drosophila melanogaster 7865.
- leaves**, damage effects on, Insecta, Glycine max 6939.
- vapors**, density, eggs, Hemileuca olivacea 234.
- Water management**, effects on community composition, Culicidae, Czechoslovakia, Moravia 7016.
- effects on vegetation patterns**, geographical distribution, disease transmission, Glossina 1344.
- pest control**, reservoirs, Culicidae, USA, Tennessee 2935.
- Water pollution**, effects on pest control, Lagenidium giganteum, Culex quinquefasciatus 4513
- pollution effects**, colonization, artificial substrates, Hygrobatas fluvialis 1939.
- pollution effects**, community composition, streams, Chironomidae, Belgium, Antwerp 78
- Water quality**, habitat, new species, Nimbochroma pinderi, USA, Southeast 4845
- indicator species**, Hydropsycha lobata, Portugal, Vila do Conde 3053.
- Water relations**, thermoregulation, arid zones, Geocoris punctipes, Lygus hesperus 5707.
- Water requirements**, water balance, effects on habitat selection, Orchesella cincta, Tomocerus minor 2604.
- Water reservoirs**, littoral zone, colonization, Formicidae, Australia 9174.
- Water salinity**, occurrence, Stratiomys longicornis, Dead Sea 9375.
- salt marshes**, inland water environment, abundance, ecological distribution.
- Water salinity (continued)**, Culicidae, USA, Virginia 8610.
- Water springs**, environmental degradation, recovery, agecomposition, Gumaga nigricula, USA, California 7812.
- Water stress**, effects on pest resistance, host plants, Medicago sativa, Therioaphis maculata 5324.
- host plants**, chemical composition, effects on survival, fecundity, Brevicoryne brassicae 7559.
- temperature effects**, hemolymph, chemical composition, Spodoptera exigua 4173.
- Water temperature**, abundance, species composition, lakes, reservoirs, Chironomidae, USA, Florida 8609.
- aquatic animals**, evolution ecology, reviews, Insecta 6235.
- effects on development**, survival, immature stages, Anopheles culicifacies, Pakistan, Punjab Province 6697.
- effects on oviposition**, culex pipiens 5081.
- environmental effects**, emergence, diel variations, Chironomidae, Canada, Ontario 6224.
- factors affecting**, emergence, diel periodicity, Chironomidae, Canada, Ontario, Windrow Farm Stream 8604.
- Water uptake**, gut, characterization, localization, Schistocerca gregaria 232.
- ion exchange**, digestive tract, Acrididae 239.
- Watermelon mosaic virus**, disease transmission, role, helper factor, Myzus persicae 3706.
- Watshamiella fletchii**, new species, morphology, Mascarene Is., Reunion I. 4877.
- Watshamiella lucens**, new species, morphology, Mascarene Is., Reunion I. 4877.
- Wavelength**, effects on development, oligopauae, Aleochara asari 7464.
- light**, effects on phototaxis, Dendroctonus pseudotsugae, Trypodendron lineatum 2753.
- visual discrimination**, photoreceptors, filters, Phasoba 8920.
- Wax**, combs, strength, apiculture, Apis mellifera 5317.
- Waxes**, exocrine glands, ultrastructure, Eriococcus lagerstraeiae 990.
- Weather**, body temperature, activity patterns, diel variations, seasonal variations, Tenebrionidae, USA, Washington 8274.
- effects on life cycle**, disease transmission, mathematical models, Ixodes ricinus 1361.
- effects on population dynamics**, pests, Lepidoptera, Brazil 6834.
- effects on trap attractancy**, Hydrotaea irritans 2983.
- environmental effects**, flight activity, Dendroctonus frontalis 1169.
- environmental effects**, population decline, Tabanus similis, Chrysops aestuans, USA, South Dakota 4474.
- migrations**, Phoebe sennae, Urbanus proteus, Agraulis vanillae, Precis coenia, USA, Florida 5978.
- Weathering**, insecticides, effects on efficacy, Epilachna vigintioctopunctata 7712.
- Webs**, construction, interspecific relationships, Dendromyrmex chartifex, Dendromyrmex fabricei 2272.
- ecology**, habitat comparison, Araneidae, Costa Rica 1272.
- escape behavior**, Araneae, Insecta 6732.
- fibers**, protein biosynthesis, chemical composition, Nepheila clavipes 186.
- food organisms** escape behavior, Lepidoptera, Araneidae 454.
- glycoprotein composition**, Argiope 937.
- mating behavior**, courtship, Portia fimbriata, Australia, Queensland 4287.
- morphology**, new species, Tetragnatha boninensis, Japan, Bonin Islands 1593.
- orientation**, solar radiation, effects on, thermoregulation, Micrathena gracilis 1918.
- predation**, habitat preferences, guilds, Araneae 1959.
- predatory behavior**, food preferences, Mastophora dizzydeani 1949.
- predatory behavior**, Portia fimbriata, Australia, Queensland 4343.
- prey species composition**, Dictyna, Egypt, Arab Rep. 480.
- sampling**, bacteria, aerosols, Araneae 8469.
- silk**, chemical composition, Aranea 196.
- silk**, host plants effects on, Tetranychus cinnabarinus 2841.
- silk**, resting behavior, Insecta 5905.
- site location**, foraging behavior, strategy, Araneidae, Linyphiidae 5170.
- spinning**, insecticides effects on, Tetranychus cinnabarinus 1048.
- spinning**, oviposition, hyperparasitism, Signiphora coquillettii 7543.
- structure**, design, prey attractancy, Phoronidia studei 2790.
- structure**, function, aquatic environment, predatory behavior, Wendigilarda 1967.
- structure**, social behavior, sanitation, Mallos gregalis 2143.
- structure**, stabilimenta, defense mechanisms, Argiope aurantia, Argiope trifasciata 1990.
- vibrations**, transmission, Araneae 5913.
- Weed control**, attack, developmental stages, Emex australis, Perapion antiquum 5205.
- biological control**, defoliation, Galericula rufa, Convolvulus arvensis 2944.
- biological control**, historical account, Chromolaena odorata, Pareuchaetes pseudoinsulata 6079.
- biological control**, introduced species, Perapion antiquum, Emex australis, Australia 6078.
- biological control**, introduced species, Ulex europaeus, Apion ulicis, Apion scutellare, Agonopertis ulicetella, New Zealand 5335.
- biological control**, Longitarsus alabineus, Heliotropium europaeum, Australia 2950.
- biological control**, methodology, Insecta 1432.
- biological control**, predators life history, Cyrtorhynchus trimaculatus.
- Trichosirocalus horridus** 1979.
- biological control**, Rumex obtusifolius, Gastrophysa atrocyanica 5985.
- biological control**, Samocides albiguttalis, Eichhornia crassipes, USA, Florida 692.
- chemical control**, apiculture 2215.
- control programs**, galls, Cirsium arvense, Urophora cardui, Canada 3805.
- control fields**, effect on abundance, Insecta, Glycine max 2997.
- effects on pest control**, horticulture, Insecta 3728.
- environment management**, Carduus nutans, Rhynchosyris conicus, Cyrtorhynchus horridus, USA, North Dakota 2208.

Weed control, (continued)

- galls, emergence, *Urophora cardui*, *Cirsium arvense* 8354.
host plants, feeding, *Eurostera cinerosella*, *Artemisia absinthium* 7668
host plants, *Notaris bimaculatus* feeding effects on, *Agropyron repens* 1250.
infestation effects on growth, *Acena chondrillae*, *Chondrilla juncea* 9278
introduced species, aquatic environment, *Eichhornia crassipes*, *Neochetina eichhorniae*, USA, Louisiana 1254
natural enemies, *Heliconidae*, *Passiflora mollissima*, USA, Hawaii 2947
parasites, *Cordia curassavica*, *Metrogaleruca obscura*, *Eurytoma ativa*, Malaysia 2960
pest control, environment management, horticulture, *Insecta* 3958

Weeds,

- aquatic plants, biological control, *Arzama densa*, *Eichhornia crassipes* 3550
biological control, *Cirsium arvense*, *Eutrothyridium litura*, Canada, Ontario 2952
biological control, environmental impact, *Cynara scolymus*, *Tachisporus*
horridus, *Eutrothyridium trimaculatus* 531.
biological control, *Perapon antiquum*, *Emex australis* 5205.
herbivores, ecological distribution, reviews, *Xanthium spinosum*, *Xanthium strumarium*, *Insecta*, World 8357.
host plants, beet yellows virus vectors, *Myzus persicae*, USA, Washington 6175.
host plants, overwintering, survival, *Lygus* 6012.
host plants, species composition, *Lygus*, USA, Washington 8350.
infestation, *Acarina*, Egypt 6974.
predators, *Chrysopidae*, *Coccinellidae*, *Chrysopidae* 6852.
species composition, abundance, *Lygus*, USA, Arizona 4604
surveys, abundance, *Insecta*, Egypt 6957.
toxicity, herbivores, *Conium maculatum*, USA, California 8353.

Weight,

- galls, autecology, methodology, parasitoids, *Dryocossus kuripihus* 7576.
silk glands, cocoons, strains, hybrids, *Bombyx mori* 6963.

Weightlessness,

- mutation, development, reproduction, *Tribolium castaneum* 1108.

Wells,

- population density, larvae survival, *Anopheles stephensi* 616.

Wendilgarda,

- predatory behavior, webs, structure, function, aquatic environment 1967.

Wesmaelius helveticus,

- occurrence, Hungary 8675.

West Africa,

- abundance, species composition, activity patterns, *Simulium* 3630.
morphology, geographical distribution, new records, *Aculomorphia* 4747.
research programs, pest control, crops, *Acriddidae* 681.
species identification, enzymes, *Simulium* 2568.

West Indies,

- check lists, nomenclature, *Bruchidae* 7954.
new records, geographical distribution, *Scolytidae* 7167.
surveys, *Anthicidae* 1612.
taxonomic revision, synonymy, *Conotulus* 8750.

West Indies, Saint Lucia,

- new species, taxonomy, morphology, *Centrjapx mahunkorum*, *Parajapx alienus* 4823

Western Samoa,

- pest control, biological control, pathogens, baculovirus, *Metarhizium anisopliae*.
Oryctes rhinoceros 5348.
pests, biological control, baculovirus, *Oryctes rhinoceros* 6184.

Wetlands,

- environment management, control programs, pest control, *Aedes sollicitans*, USA.
Rhode Island, Barrington 5359.
environmental surveys, aquatic animals, *Insecta*, Canada 3930.

Whartonia kulundaeensis,

- new species, parasites, *Dobsonia pannietensis*, *Dobsonia moluccensis*, Papua New Guinea, Irian Jaya 797

Whartonia novaeae,

- new species, taxonomy, morphology, *Tanzania* 6344

Whartonia oventi,

- records, hosts, *Chiroptera*, *Tanzania* 6344

Wheat,

- pest resistance, *Mayetiola destructor* 661

Wiedemannia lepidi,

- mating behavior, courtship 3526

Wild type,

- host plants, pest resistance, *Trialetodes vaporariorum*, *Lycopersicon hirsutum*,
Solanum pennellii 9283.
mutants, competition, fitness, *Pectinophora gossypiella* 8364

Wildlife,

- parasites, infestation, *Urocyon cinereoargenteus*, *Sarcophaga scabies*, USA,
Pennsylvania 5193

- parasitism effects on, *Ixodidae*, *Unguiculata*, *Zimbabwe* 633

Wildlife conservation,

- endangered species, education, *Lepidoptera*, *British Isles* 2123
endangered species, rare species, *Invertebrata* 2147
industries, *Lepidoptera*, *Taiwan* 2113
institutions, *Insecta*, *British Isles*, *England* 2125
institutions, *Lepidoptera*, *British Isles* 2124
rare species, *Lepidoptera*, *British Isles* 2125
rare species, *Lepidoptera*, *British Isles*, *England* 2119
role, education, *Lycena heteronea clara*, USA, California 2112
wildlife management, plant communities, *Lepidoptera*, Canada, Newfoundland 2107

Wildlife management,

- collections, directories, federal policy, public lands, *Arthropoda*, USA 4754
disease transmission control programs effects on, insecticides, nontarget
organisms, *Glossina* 1346

- pest control, myxomatosis vectors, *Spilopsyllus cuniculi*, *Oryctolagus cuniculus*,
Australia, New South Wales, *Uran* 7627

- wildlife conservation, plant communities, *Lepidoptera*, Canada, Newfoundland 2107

Willowia jacobsoni,

- sexual dimorphism, new records, Puerto Rico 1619

Willowia nigromaculata,

- population growth, reproductive strategy 6862

Wilt,

- disease transmission, *Oncopeltus cingulifer*, *Trinidad* 5414

Wind,

- dispersal, parasites, *Scelio fulgidus* 4451.
dispersal, pests, *Homoeosoma electellum*, USA, Gulf Coast, Canada, Saskatchewan
2100
drift, insecticides, aerosols, toxicity, *Glossina morsitans*, *Boswana* 1469
effects on escape behavior, walking, neurophysiology, *Periplaneta americana* 2529

Wind, (continued)

- environmental factors, flight activity, food, temperature, *Schistocerca gregaria*
1171
mechanical stimuli, discrimination, escape behavior, *Periplaneta americana* 2752.
migrations, *Phoebus sennae*, *Urbanus proteus*, *Agraulis vanillae*, *Precis coenia*,
USA, Florida 5978
orientation, chemical stimuli, flowers, *Hadena bicruris*, *Deilephila elpeor* 5866.
orientation, homing behavior, *Polistes gallicus*, Italy 1262.
pollination, host plants, flowering phenology, *Insecta*, USA, Missouri 2047.
sensory stimuli, perception, neurons, *Periplaneta americana* 7291

Wind removal,

- host plants, *Tetranychus neocaledonicus* 7775.

Wing discs,

- cells, growth, competition, *Drosophila* 3468
cells, morphology, development, larvae, *Drosophila* 7429
differentiation, mitosis, compartmentation, *Drosophila* 1084.
distribution, development, *Drosophila* 339
fragments, regeneration, *Drosophila* 3467
protein biosynthesis, defective mutant, *Drosophila melanogaster* 3908
protein biosynthesis, *Galleria mellonella* 2575
radiation effects on, *Drosophila melanogaster* 1106.
regeneration, regulation, *Drosophila melanogaster* 344.
regeneration sequence, *Drosophila* 3469

Wing disks,

- gap junctions communication, embryogenesis, *Drosophila* 5100

Wings,

- aerodynamic properties, flight, *Isogenus*, *Chrysopa*, *Myrmecole*, *Limnephilus* 6522.
allometry, males, *Anisoptera* 3261
anatomy, coloration, males, *Megapodagrionidae*, *Chlorocyphidae* 3362
biometrics, genetic control, development, *Drosophila* 3503.
chemoreceptors, effects on feeding behavior, *Phormia* 1737
coloration, morphology, classification, *Trimerotropis sparsa*, USA, Nebraska 8890.
coupling, setae, *Ekevridae*, *Apheleidae* 1726
epithelium clones, growth models 9
flight activity, wing-beat frequency, *Locusta migratoria* 2522
flight morphology, environmental effects, habitat, *Trox* 4954
fossils, morphology, *Cretaceous* period, *Phasmida*, Greenland 4752
genetics, variations, clones, *Heteromphala merope* merope, Australia 3925.
imaginal discs, cell lines, protein biosynthesis, *Trichoplusia* 8896
length selection effects on allometry loci, *Drosophila melanogaster* 9378
morphology, aging effects on, *Zapionus parvifur* 6508
morphology, *Apelinius*, *Mesidia*, *Mesidiopsis* 4108
morphology, *Goenada* 8005
morphology, hamuli, taxonomy, *Brachionae* 7277.
morphology, mimicry, predation effects on, *Lycanidae* 2786.
morphology, phenotypes, temperature-sensitive mutant, *Drosophila melanogaster*
1533
morphology, taxonomy, *Bruchidae* 7166.
morphometry, identification *Nasiparva lugens*, *Sogatella furcifera* 5640
mutation, homoosis, heterozygotes, homozygotes, *Drosophila melanogaster* 3901.
mutation, mutants, developmental genetics, genetics, *Drosophila* 1523
origin, evolution, *Insecta* 774.
polymerism, host plants nutritional status effects on, *Nasiparva lugens* 81.
removal, effects on biochemical characteristics, crop, *Solenopsis geminata*,
Solenopsis richteri 1754.
sensilla, histology, *Cetonia aurata*, *Geotrupes silvaticus* 3702.
shape, aerodynamic properties, *Schistocerca gregaria* 7287.
taxonomy, morphology, *Leptocryptus* 1
veins, terminology, *Ephippigerinae* 72.
venation, comparative studies, *Coleoptera* 73.
venation, malformations, *Cispa*, *India* 6509
venation, *Orthocentrus triangularis* 6512.

Winter,

- mortality, cold temperature, eggs, *Lymantia dispar*, Canada, Quebec 2127.
pests, host plants, development, fecundity, *Myzus persicae*, India, Simla 7746.
physiology, reproduction, *Anthonomus grandis grandis* 3558
survival, aggregation, *Hippodamia quinquenotata*, Canada, Alberta 3637.
survival, *Anthonomus grandis*, USA, Mississippi 614
survival, diapause, hybrids, *Heliothis subflexa*, *Heliothis virescens* 1102.
survival, *Hemiptera*, USA, South Carolina 455.
survival, larvae, *Anicetus gemmatilis*, USA, Mississippi 1273.
temperature effects, larvae, mortality, *Ixodes ricinus*, Ireland 1126.
temperature, effects on activity patterns, *Dermacentor variabilis* 7587.

Wisconsin,

- larvae, feeding behavior, host plants, *Trifolium repens* 3568

Wisconsin cervinata,

- insecticides, permethrin, cypermethrin, topical applications, penetration,
metabolism 5787

Withania,

- host plants, steroids, antifeedants, *Epilachna varivestis* 2077.

Wittneropodius,

- revision, Nepal 808

Wolffia opaca,

- strike, mortality, juveniles, *Anas clypeata*, *Anas discors*, Canada, Saskatchewan
5190

Wolbachia,

- pathogens, infection, effects or eggs development, *Aedes polynesiensis* 1542.

Woldana,

- new genera, taxonomy, morphology, Panama 2439.

Woldana campana,

- new species, taxonomy, morphology, Panama 2439.

Wood,

- attraction, companion, vectors, *Scolytus multistriatus*, *Ulmus procera* 2062.
borers, digestion, nutrition, feeding behavior, *Crioceraphus syriacus*, *Rhagium*
inquisitor, *Ergates faber* 4344
damage, urban environment, feeding behavior, *Coptotermes kishori*, India 1405.
essential oils, response, survival, *Coptotermes beimi* 2850.
Eucalyptus, pest resistance, *Nasutitermes exitiosus* 4327.
extracts, effects on survival, *Reticulitermes flavipes*, *Coptotermes formosanus*
1810
food consumption, environmental effects, *Hydrolytus bajulus* 2000.
fumigation, methyl bromide, mortality, *Ulmus*, *Scolytus multistriatus* 8491.
Gloeophyllum trabeum infection, bait, *Isoptera* 3250.
introduced species, occurrence, *Platyphodidae*, Israel 9464.
litter fall, association, abundance, feeding, *Reticulitermes flavipes*,
Reticulitermes virginicus, USA, Southeast 8598.

- Wood, (continued)**
 pest control, alkylammonium derivatives, *Reticulitermes* 3587.
 pests, infestation, *Syndesus cornutus*, *Trametes lilacino-gilva* 2771.
 pheromone traps, catching methods, *Trypandron lineatum*, *Gnathotrichus retusus* 8573.
 preservatives, effects on colonies, apiculture, *Apis mellifera* 3019.
- Woodwardthligus gracilis**,
 new species, new genera, morphology, geographical distribution, Australia 825.
- Wool**,
 production, infestation effects on, sheep, *Damulina oviv* 6889.
- Workers**,
 castes, colonial characteristics, *Lasiosaglossa zephyrum* 7003.
 differentiation, diets effects on, *Scaptotrigona postica* 7001.
 egg laying, intraspecific relationships effects on, *Bombus terrestris* 469.
 emergence, mortality, queens age effects on, *Apis mellifera* 8595.
 fatty acids, head, age, *Apis mellifera* 8090.
 food consumption, colonial characteristics, *Solenopsis invicta* 1991.
 foraging behavior, fungus gardens, colonial characteristics, *Macrotermes nicholsoni* 2266.
 juvenile hormones, hemolymph proteins, polyphenism, *Apis mellifera* 3339.
 larvae feeding, *Bombus terrestris*, *Bombus terrestris* 749.
 larvae removal, disease resistance, brood disease, *Apis mellifera* 8589.
 life span, dry weight, *Apis mellifera* 8208.
 longevity, *Melipona quadrifasciata* 9032.
 males, evolution, social organization, Hymenoptera 3848.
 mandibular glands, secretory cells, ultrastructure, *Apis mellifera* 4951.
 mating behavior, queens effects on, *Lasiosaglossa zephyrum* 2268.
 morphology, keys, identification, *Formica rufa*, Sweden 4106.
 Nasonov gland pheromones, attractancy, *Apis mellifera* 5115.
 nest building (non-reproductive), termite, *Apicitermes lamani* 6990.
 nesting behavior, colonial characteristics, *Polistes chinensis antennalis* 2269.
 ovary development, *Formica sanguinea* 3505.
 oxygen consumption, temperature effects, *Atta laevigata*, *Atta sexdens rubropilosa* 4174.
 population levels, marking methodology, eutropism, *Myrmica rubra*, *Myrmica scabrinodis*, *Lasius niger* 6981.
 population structure, colonial characteristics, males, queens, *Bombus perplexus* 366.
 production, sex ratio, queens mortality, *Apterostigma denigerum* 3047.
 queens, reproductive strategy, social organization, mathematical models, Hymenoptera 3050.
 queens sex pheromone extracts, attractancy, *Apis mellifera* ligustica 8272.
 queens, social behavior, colonial characteristics, *Apis mellifera* 3051.
 recruitment, feeding behavior, trail pheromone, *Myrmica rugulosa* 4348.
 social organization, mating behavior, pheromones, *Myrmica rugulosa* 5169.
 social organization, sex ratio, kin selection, Hymenoptera 3048.
 sound production, stridulation, morphology, *Leptothorax muscorum* 1921.
 sternal gland, trail pheromone secretion, *Trimerivertea bettonianus* 3374.
 survival, queens pheromones effects on, *Apis mellifera* 4647.
 swarming behavior, aggression, pheromones, *Atta*, *Acromyrmex* 4651.
 swarms, body weight estimation, population studies, *Apis mellifera* 8027.
 swarms, dispersal, engagement, *Apis mellifera* adansonii 5210.
 venom, phospholipase A₂, *Apis mellifera* 3431.
- World**,
 collections, terminology, acronyms, museums 7925.
 geographical distribution, surveys, Dryopodidae, Elmidae, Psephenidae 5507.
 reviews, herbivores, ecological distribution, weeds, *Xanthium spinosum*, *Xanthium strumarium*, Insecta 8357.
 taxonomic revision, *Cicindela lunulata* subspecies 7983.
- Wormaldia vargali**,
 new species, Yugoslavia, Slovenia 4066.
- Wound healing**,
 patterns regulation, imaginal discs, ultrastructure, *Drosophila melanogaster* 341.
 physiology, *Geolycosa piketi* 1092.
- Wounds**,
 infestation, case reports, man, Diptera 7642.
- Wuchereria bancrofti**,
 parasites, infection susceptibility, inheritance, *Aedes* 8146.
 pathogens, vectors, *Culex pipiens*, Africa 1316.
- Wyeomyia smithii**,
 artificial diets, rearing, larvae 5625.
- Wyeomyia vanduzeei**,
 bionomics, host plants 2075.
 disease transmission vectors, poxvirus 3697.
 malaria transmission, susceptibility, USA, Florida 1320.
- X-Ray crystallography**,
 neurotoxins structure, *Centruroides sculpturatus* 8174.
- Xamiatus**,
 new genera, morphology, taxonomy, Australia 2389.
- Xamiatus bulburin**,
 new species, morphology, taxonomy, Australia 2389.
- Xamiatus kila**,
 new species, morphology, taxonomy, Australia 2389.
- Xamiatus magnificus**,
 new species, morphology, taxonomy, Australia 2389.
- Xamiatus rubrifrons**,
 new species, morphology, taxonomy, Australia 2389.
- Xanthane dye**,
 toxicity, *Musca domestica* 5788.
- Xanthene**,
 larvicides, ovidices, insecticides, effects on, *Musca domestica* 1041.
- Xanthine dehydrogenase**,
 activity, genetic control, mal gene, *Drosophila melanogaster* 7858.
 polymorphism, modification, loci, *Drosophila melanogaster* 3069.
- Xanthines**,
 effects on longevity, photoconduction, pigments, *Vespa orientalis* 4948.
- Xanthippus corallipes**,
 stridulation, auditory communication 262.
- Xanthium spinosum**,
 weeds, herbivores, ecological distribution, reviews, Insecta, World 8357.
- Xanthium strumarium**,
 weeds, herbivores, ecological distribution, reviews, Insecta, World 8357.
- Xanthocephalus microcephala**,
 association analysis, community composition, Insecta 2064.
- Xanthocephalus sarthrae**,
 association analysis, community composition, Insecta 2064.
- Xanthocnemis Zealandica**,
 avoidance behavior, predation, environmental conditions 1289.
 thermoregulatory behavior, body temperature, New Zealand 6701.
- Xanthocroa carniolica**,
 new records, geographical distribution, Sweden, Gotska Sandöen I. 4704.
- Xanthocryptus novaezealandicus**,
 parasites, mortality, *Synanthedon salmachus*, New Zealand 4415.
- Xanthomonas malvacearum**,
 pathogens, disease transmission, feeding, *Earias* 7380.
- Xanthomonas manihotis**,
 vascular bacteriosis, vectors, check lists, *Manihot esculenta*, Insecta 4528.
- Xanthopimpla**,
 parasites, *Sylepta derogata*, Nigeria, Ibadan 5938.
- Xanthopimpla stemmator**,
 parasitoids, reproductive effort, longevity, fecundity, *Chilo partellus* 8315.
- Xanthotera politum**,
 mortality, parasitoids effects on, USA, New Jersey 2034.
- Xanthotoxin**,
 host plants, chemical composition, growth, *Papilio polyxenes* 5968.
- Xenelmis leechi**,
 new species, taxonomy, morphology, Peru 4782.
- Xenelmis marcapata**,
 new species, taxonomy, morphology, Peru 4782.
- Xenopsylla cheopis**,
 ectoparasites, *Mus musculus* 513.
- Xenopsylla conformis**,
 feeding behavior, blood meals, man 9124.
- Xenopsylla gergylli minax**,
 feeding behavior, blood meals, man 9124.
- Xenopus laevis**,
 oocytes, microinjection, chorion proteins, *Bombyx mori*, cDNA hybridization analysis 8083.
- Xenorhabdus**,
 pathogens, functional morphology, dimorphism, biological control, *Galleria* 4189.
- Xenorhabdus luminescens**,
 association, *Heterorhabdus bacteriophora*, parasitism, mortality, *Galleria mellonella* 1814.
 infection, parasitism, *Heterorhabdus bacteriophora*, *Culex pipiens* 5728.
 pathology, synergism, *Heterorhabdus bacteriophora*, *Culex pipiens* 4202.
- Xenorhabdus nematophilus**,
 symbiosis, effects on hosts pathogens, *Neocleptana carposcapes*, *Hyalophora cecropia* 2641.
- Xenotarsoneum abbreviatum**,
 new species, taxonomy, morphology, USSR, Crimea 6342.
- Xeroconiopteryx**,
 classification, systematics 2468.
- Xeronelecta interrupta**,
 new records, repopulation, USA, Illinois, Henderson Co. 9493.
 rare species, records, occurrence, USA, Illinois 6328.
- Xestia**,
 new species, morphology, geographical distribution, North America 40.
 species identification, electrophoresis, morphology 68.
- Xestia adela**,
 anatomy, genitalia, identification, Canada, Ontario 2667.
 identification, electrophoresis, morphology 68.
 new species, morphology, geographical distribution, North America 40.
 population genetics, genetic variance, allozymes, Canada, Ontario 8660.
- Xestia c-nigrum**,
 population genetics, genetic variance, allozymes, British Isles 8660.
- Xestia dolosa**,
 anatomy, genitalia, identification, Canada, Ontario 2667.
 identification, electrophoresis, morphology 68.
 new species, morphology, geographical distribution, North America 40.
 population genetics, genetic variance, allozymes, Canada, Ontario 8660.
- Xestiodon**,
 new genera, taxonomy, morphology, identification keys, Neotropical Region 4776.
- Xestiocephalinae**,
 revision, Cicadellidae, Africa 829.
- Xestiocephalus**,
 11 new species, taxonomy, morphology, Panama 7201.
- Xestiocephalus dubius**,
 new species, taxonomy, morphology, South America 5588.
- Xestiocephalus similis**,
 new species, taxonomy, morphology, South America 5588.
- Xestiocephalus variabilis**,
 new species, taxonomy, morphology, South America 5588.
- Xestopus**,
 revision, Nepal 808.
- Xestopus kumatal**,
 new records, Nepal 808.
- Xiphidium caeruleum**,
 pollination, flowers effects on feeding behavior, *Paratetrapedia calcarata*, *Euglossa imperialis* 558.
- Xois arectus**,
 pupae, development, host plants distribution, *Themeda australis*, Imperata cylindrica, *Digitaria didactyla* 1244.
- Xolalgidae**,
 taxonomy, morphology 2382.
- Xolalginae**,
 new families, morphology, taxonomy 2382.
- Xyleborini**,
 taxonomy, morphology, keys, Hawaii 7165.
- Xyleborius**,
 taxonomy 806.
- Xyleborus brighti**,
 synonymy, *Xyleborus howdenae* 806.
- Xyleborus fornicatus**,
 parasites, hosts, *Acacia decurrens*, new records, India, Nilgiris 2088.
- Xyleborus howdenae**,
 synonymy, *Xyleborus brighti*, *Xyleborus buski*, taxonomy 806.
- Xyleborus soliticeps**,
 taxonomy 7167.

Subject Index

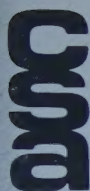
- Xylina lunifera**, new records, geographical distribution, Iberian Peninsula 7077.
- Xyletinus pelatus**, egg laying, substrate preferences, survival, growth, larvae, life cycle 2701.
- Xylocopa**, pollination, flowering phenology, *Solanum palinacanthum* 4411.
- Xylocopa pubescens**, colonial characteristics, nesting behavior, social behavior 7007.
- Xylocoris**, mating behavior, natural selection 1152.
- Xylocoris curatiana**, introduced species, occurrence, Eire 9451.
- Xylomyges curialis**, sex pheromone, biochemical characteristics, attractancy 5703.
- Xylophagidae**, rare species, species composition, Czechoslovakia 7901.
- Xylophagus compeditus**, new records, geographical distribution, Czechoslovakia 7901.
- Xylosandrus germanus**, bibliographies, USA 7130.
- Xylosandrus**, geographical distribution, North America 7919.
- Xyloa pendleburyi**, taxonomic revision, nomenclature, synonymy, Oriental Region 6412.
- Xylotopus**, new genera, taxonomy, morphology, Nearctic Region 3994.
- Xylotrechus colonus**, introduced species, occurrence, Eire 9451.
- 3,5-Xylyl methylcarbamate**, pollution effects, uptake, *Culex pipiens* 4219.
- Xyphobelia**, taxonomy, morphology 8.
- Xyronotidae**, taxonomy, keys 4061.
- Xystricus**, food preferences 1197.
- Xysticus ferox**, predators, feeding behavior, prey, *Rhinocyclus conicus*, USA, Virginia 1200.
- Xysticus funestus**, predators, feeding behavior, prey, *Rhinocyclus conicus*, USA, Virginia 1200.
- Yacna transalpina tllaventa**, intraspecific hybridization, *Zygaena transalpina alpina* 9421.
- Yaploca evansii**, parasitism, larvae, Cerambycidae, South Africa 5178.
- Yeasts**, attractancy, developmental stages, feeding behavior, niche pattern, *Drosophila buzzatii*, *Drosophila aldrichi* 3303.
- attractancy**, genetic variance, feeding behavior, *Drosophila buzzatii*, *Drosophila aldrichi* 3368.
- diets**, effects on growth, development, *Dacus cucurbitae* 7447.
- feeding**, oviposition substrate preferences, *Drosophila* 9072.
- food availability**, oviposition site selection, niche pattern, *Drosophila melanogaster* 3530.
- food preferences**, substrate preferences, foraging behavior, *Drosophila mojavensis* 4442.
- gut microflora**, diets, feeding behavior, *Drosophila* 5917.
- symbionts**, antibiotics effects on, mortality, *Nilaparvata lugens* 8307.
- symbionts**, isolation, *Nilaparvata lugens* 1215.
- Yellow fever**, vectors, geographical distribution, *Aedes furcifer*, *Aedes taylori*, Gambia 3658.
- Yellow fever virus**, disease reservoirs, Haemagogus janthinomys, Brazil 625.
- disease transmission**, epidemiology, rain forests, *Aedes africanus*, Ivory Coast 9230.
- disease transmission**, vectors, Haemagogus equinus 1379.
- Yellows**, vectors, *Beta vulgaris*, *Aphis craccivora*, *Aulacorthum solani*, *Macrosiphum euphorbiae*, *Myzus persicae*, Tasmania 6097.
- Yemen**, Quarantil virus, isolation, characterization, vectors, *Hyalomma dromedarii* 5270.
- Yemen, Arab Rep.**, parasites, livestock, surveys, Ixodoidea 6067.
- parasitoids**, species composition, Aphididae, Aphelinidae 7902.
- Yield**, agricultural practices, pest control, Insecta, *Zea mays*, *Vigna unguiculata* 8520.
- barley yellow dwarf virus infection**, vectors, *Triticum*, *Rhopalosiphum padi* 8444.
- chemical control effects on**, *Citrus*, *Aonidiella auranti* 8580.
- crop fields**, pest control, chemical control, *Agrotis ipsilon*, India 7723.
- crop fields**, pests, *Philaenus spumarius*, *Medicago sativa* 8561.
- crops**, pests, defoliation, *Zea mays*, *Mythimna separata* 6941.
- damage**, larvae feeding, *Nezara viridula*, *Vigna unguiculata* 2235.
- damage**, *Mythimna separata* effects on, *Empoasca lybica*, *Solanum melongena* 8485.
- damage**, *Zea mays*, *Diuraneae saccharalis*, *Spodoptera frugiperda* 3751.
- damage**, *Zea mays*, *Sitophilus zeamais* 2039.
- feeding behavior effects on**, *Apis mellifera*, *Malus domestica* 1237.
- feeding damage**, pests, *Oenobius pugnax*, *Sorghum* 8506.
- grain**, pollination effects on, *Apis mellifera* 2186.
- growth**, pests infestation effects on, *Empoasca lybica*, *Solanum melongena* 8485.
- honey**, comb construction effects on, apiculture 7775.
- host plants**, damage, *Teleoglytus commodus*, *Trifolium repens*, *Lolium perenne* 2254.
- host plants**, pest resistance, *Nilaparvata lugens*, *Oryza sativa* 6197.
- infection effects on**, *Hypera postica*, *Medicago sativa* 6962.
- insects**, feeding effects on, *Poa pratensis*, *Cyclodictya minima* 1773.
- parasites effects on**, *Aphis craccivora*, *Vigna sesquipedalis* 529.
- pest control**, chemical control, *Triticum*, *Microtermes obesi* 5371.
- pest control**, *Vigna unguiculata*, *Chakodermus aeneus* 8540.
- pests**, defoliation effects on, *Oryza sativa*, *Pseudodelia unipuncta* 8489.
- pests effects on**, *Empoasca fabae*, *Medicago sativa* 731.
- pests**, infestation, damage, *Heliothis zea*, *Gossypium* 8526.
- pests**, infestation effects on, *Agromyza litorea*, *Medicago sativa*, USA, Vermont 8563.
- pests**, infestation effects on, *Heliothis*, *Gossypium* 8582.
- pests**, infestation effects on, *Phyllophaga*, *Pinus resinosa* 7765.
- Yield, (continued)**
- pests**, infestation effects on, *Sorghum* 6164.
- pests**, infestation effects on, *Tetranychus arbutus*, *Gossypium* 6961.
- pests**, infestation, *Triticum*, *Sitobion avenae* 2042.
- pollination effects on**, agricultural practices, *Apis mellifera*, *Helianthus annuus* 3730.
- pollination effects on**, *Brassica napus oleifera*, *Apis mellifera* 4582.
- seeds**, damage effects on, *Isopora*, *Triticum* 5331.
- Zeas**, crop fields, infestation, *Sphenophorus callosus* 2249.
- Yliden auspey**, new records, India 801.
- Yolk**, oogenesis, chemical composition, histochemistry, proteins, *Sarcophaga ruficornis* 1083.
- proteins**, characterization, purification, *Drosophila melanogaster* 5830.
- proteins**, gene expression, 20-hydroxyecdysone effects on, fat body, *Drosophila melanogaster* 6243.
- proteins**, genes, mRNA, nucleotide sequence, ecdysone effects on transcription, *Drosophila melanogaster* 4662.
- Yponomeuta**, antennal sensilla, electrophysiological recording, chemical stimuli, pheromones 4143.
- Yucca whipplei**, flowering pollinators, pollinators population dynamics, *Tegeticula maculata* 8347.
- Yugoslavia**, abundance, geographical distribution, population density, *Anopheles maculipennis* 3635.
- activity patterns**, light effects, humidity, *Phlebotomus* 2766.
- disease reservoirs**, ecological distribution, river basins, *Anopheles messeae* 670.
- habitat**, feces, *Tyto alba*, *Pterodroma* 4436.
- new species**, taxonomy, morphology, *Paradrina suscinja* 4893.
- new species**, taxonomy, morphology, *Rumicrita grandicula*, *Aphalara migrumaculosa*, *Pachylia montana* 6423.
- predators**, feeding, life cycle, *Aphodites* 3552.
- species composition**, surveys, *Culicidae* 3939.
- species composition**, surveys, *Macrolepidoptera* 3936.
- species composition**, surveys, *Pterodroma* 3938.
- Yugoslavia, Fed. R.**, ecological distribution, substrate preferences, larvae, *Chironomidae* 566.
- Yugoslavia, Slovenia**, species composition, occurrence, *Lepidoptera* 9455.
- Zabrotes**, eggs, morphology, identification, host plants 5641.
- Zabrotes subfasciatus**, pest resistance, cultivars, *Phaseolus vulgaris* 8578.
- stored products**, pests, pesticide resistance 1068.
- Zachues macrinus**, taxonomy, morphology 15.
- Zabieristes**, new genera, taxonomy 6350.
- Zabieristes africanus**, new species, taxonomy, morphology 6350.
- Zaire**, morphology, *Aedna whitei* 7238.
- new species**, taxonomy, morphology, *Atrionurus subtilis*, *Ephemerythus dissimilis*, *Caenomea magnipilosa*, *Caenomea inflex* 6413.
- new species**, taxonomy, morphology, *Armonium hoberlandti* 4011.
- new species**, taxonomy, morphology, *Carnioleus zairensis* 8767.
- Zale chisensis**, new species, taxonomy, morphology 5603.
- Zambis**, new species, taxonomy, morphology, *Aedna moori* 7236.
- new species**, taxonomy, morphology, *Prodasineura flavifacies* 7237.
- Zanthoxylum silanthaloides**, host plants, food quality, leaves, mortality, *Papilio xuthus* 7563.
- Zapada cinctipes**, trophic status, food preferences, feeding, food conversion, USA, Colorado 3855.
- Zapada oregonensis**, trophic status, food preferences, feeding, food conversion, USA, Colorado 3855.
- Zapirus parvityger**, genetic control, catalase ontogeny 8653.
- wings**, morphology, aging effects on 6508.
- Zatropia**, pests, infestation, *Rhinocyclus conicus*, USA, Virginia 5937.
- Zazenochne**, synonymy, *Suphiobius* 5610.
- Zeas mays**, bioaccumulation, mycotoxins, aflatoxins, *Aspergillus flavus*, *Ostrinia nubilalis* 4625.
- bioaccumulation**, 6-methoxybenzoxazolinone, pest resistance methodology, *Ostrinia nubilalis* 8851.
- chemical content**, stored products pests effects on, *Prostephanus truncatus*, *Sitophilus zeamais*, *Sitotroga cerealella* 3767.
- crop fields**, abundance, *Trichogramma*, USA, Maryland 5600.
- crop fields**, damage, agricultural practices, *Buseola fusca*, *Sesamia calamistris* 3748.
- crop fields**, infestation, *Sphenophorus callosus* 2249.
- crop fields**, natural enemies, distribution, *Rhopalosiphum maidis* 7728.
- crop fields**, pest control, chemical control, *Agrotis ipsilon* 3818.
- crop fields**, pest control, chemical control, *Chilo partellus* 5400.
- crop fields**, pest control, integrated control, *Chilo partellus* 5406.
- crop fields**, pesticide applications, toxicity, *Apis mellifera* 6202.
- crop fields**, population levels, sampling methodology, *Diabrotica longicornis* 6120.
- crop fields**, spatial distribution, *Diabrotica longicornis*, USA, Iowa 6118.
- crop protection**, pests, biological control, *Chilo partellus*, India 2958.
- damage**, infestation, *Buseola fusca* 687.
- disease resistance**, *Ostrinia nubilalis* infestation effects on 8496.
- food plants**, genotypes, food preferences, *Sitophilus oryzae* 8544.
- genotypes**, food preferences, nutrient utilization, *Sitophilus oryzae* 4358.
- germplasm**, pest resistance, *Atherigona* 7688.
- grain**, development, fecundity, *Sitotroga cerealella* 6102.
- grain**, development, larvae, *Rhyzopertha dominica* 5946.

Zea mays, (continued)

- grain, pests, population growth, *Heliothis armigera* 5329.
 host plants, oviposition, reproductive behavior, *Chilo partellus* 7492.
 host plants, pest resistance, developmental stages, *Ostrinia nubilalis* 6914.
 host plants, pest resistance, *Tribolium castaneum* 6931.
 host plants, varieties, pest resistance, *Chilo partellus* 7732.
 infection, interspecific relationships, *Aspergillus flavus*, *Ostrinia nubilalis* 9272.
 infestation damage, pest resistance, *Diabrotica virgifera virgifera* 6117.
 infestation, pests, life cycle, *Rhopalosiphum maidis*, India 9338.
 interspecific relationship, *Aspergillus flavus*, *Penicillium oxalicum*, *Fusarium moniliforme*, *Ostrinia nubilalis* 6899.
 maize sterile stunt virus, vectors, *Peregrinus maidis*, *Sogatella kolophon*, *Sogatella longirostris* 7646.
 new records, pest outbreaks, *Stenachroia elongella*, India, Meghalaya 7689.
Ostrinia nubilalis, pest resistance, diets, damage, *Ostrinia nubilalis* 3780.
 pest control, biological control, predators, *Coccinellidae*, *Rhopalosiphum maidis* 5295.
 pest control, insecticides, efficacy, *Oligonychus pratensis*, USA, Texas 1473.
 pest control, insecticides efficacy, *Sphenophorus callosus* 2250.
 pest control, nuclear polyhedrosis virus, *Agrotis ipsilon* 8454.
 pest resistance, antibiosis, *Heliothis zea* 2044.
 pest resistance, *Antigua* 2D-118, population levels, *Spodoptera frugiperda* 5395.
 pest resistance, host plants, genotypes, *Spodoptera eridania* 8518.
 pest resistance, host plants, methodology, *Nilaparvata lugens* 8537.
 pest resistance, hybrids, *Pyroderes rileyi* 3716.
 pest resistance, indicators, 6-methoxybenzoxazolinone, *Ostrinia nubilalis* 6099.
 pest resistance, pest control, *Chilo partellus* 5393.
 pest resistance, roots damage, measuring techniques, *Diabrotica virgifera virgifera* 6915.
 pesticide residues, mephosfolan, toxicity 7709.
 pests, defoliation, effects on yield, *Mythimna separata* 6941.
 pests, oviposition, site preferences, *Diabrotica virgifera*, *Diabrotica longicornis* 6966.
 plant diseases, maize stripe virus, disease transmission, *Peregrinus maidis* 8455.
 pollen, foraging behavior, diurnal variations, *Apis mellifera* 5923.
 pollination, foraging behavior, humidity effects on, *Apis mellifera* 2046.
 resistance, food consumption, herbivores, *Spodoptera eridania* 4602.
 seeds, pests, new records, *Calophyllos krameri*, *Parasitus consanguineus*, *Prodnichus*, India, Punjab 7735.
 stored products, protection, chemical control, decamethrin, *Sitophilus zeamais*, *Sitotroga cerealealis* 6192.
 stored products, ships, pest control, phosphine fumigation, *Insecta* 2241.
 varieties, pest resistance, feeding behavior, *Heliothis zea* 9318.
 volatiles, effects on oviposition, oogenesis, *Sitotroga cerealealis* 4270.
 yield, agricultural practices, pest control, *Insecta* 8520.
 yield, damage, *Mythimna separata* 2255.
 yield, damage, selection, *Diatraea saccharalis*, *Spodoptera frugiperda* 3751.
 yield, damage, *Sitophilus zeamais* 2039.
- Zelophora dilausa**,
 chemical control, effects on nontarget organisms, population levels, Carabidae, Staphylinidae, Czechoslovakia, Jenke Hory Mts. 7571.
 pest outbreaks, biological control, parasitoids, species composition, Switzerland 7546.
 pests, population dynamics, France 8450.
- Zelophora hesperia**,
 pest outbreaks, abundance, life cycle, USA, Idaho 9305.
 pest outbreaks, species composition, life cycle, USA, Idaho 5889.
- Zelotes javanus**,
 taxonomy, synonymy, *Drassodes ciusi* 5548.
- Zelotocoris vicosensis**,
 new species, taxonomy, morphology, Brazil, Vicosa 4850.
- Zenaidia asiatica**,
 hosts, intestinal parasites, Arthropoda, USA, Florida 3582.
- Zenaidia macroura**,
 intestinal parasites, Arthropoda, USA, Florida 3582.
- Zenobia**,
 pollination, habitat, *Bombus* 3598.
- Zepedanulus watanabe**,
 new species, taxonomy, morphology, Thailand 5550.
- Zephlebia**,
 life history, New Zealand, Waitakere R. 451.
- Zephyranthes grandiflora**,
 food plants, antifeedants, *Schistocerca gregaria* 7348.
- Zetulia mali**,
 nontarget organisms, diflubenzuron effects on, pest control, *Laspeyresia pomonella* 8562.
- Zezara viridula**,
 overwintering behavior, ecological distribution, USA, South Carolina 455.
- Zezia**,
 taxonomy, morphology, France 6498.
- Zimbabue**,
 abundance, seasonal variations, *Agrotis segetum*, *Agrotis ipsilon* 9179.
 catchability, attractants, chemoreception, *Glossina morsitans*, *Glossina pallidipes* 1173.
 control programs, chemosterilization, *Glossina morsitans morsitans*, *Glossina pallidipes* 3667.
 control programs, traps, *Glossina morsitans morsitans*, *Glossina pallidipes* 3670.
 new species, ecological distribution, *Ixodes matopi* 12.
 new species, taxonomy, morphology, *Neoradello inyangani* 8789.
 parasites, ecological distribution, host preferences, *Ixodes matopi*, Mammalia 519.
 parasitism effects on wildlife, biological control, *Ixodidae*, *Unguiculata* 633.
 species composition, host preferences, blood meals, *Culicoides* 1997.
 traps, efficacy, *Glossina morsitans morsitans*, *Glossina pallidipes* 3669.
- Zimbabwe, Mukwadzi Valley**,
 abundance, species composition, isolation bluetongue virus, *Culicoides* 9228.
- Zinlotella**,
 taxonomic revision, morphology, phylogeny, Africa 7168.
- Zizeeria knysna**,
 new records, geographical distribution, Malta 9468.
- Ziziphus jujuba**,
 galls, infestation, *Phytoptipalpus transitans*, India 6798.

Zonation, (continued)

- North Fork Holston R. 4658.
 pests, crop fields, Coleoptera, Finland 5299.
- Zonacriop exclamationis**,
 avoidance behavior, predation, environmental conditions 1289.
- Zoniocerus variegatus**,
 oviposition, diurnal variations, aggregation, environmental factors 3523.
 pests, life cycle, control programs, Nigeria 8481.
 polymorphism, seasonal variations, geographical distribution effects on 465.
 sound production (biological), auditory communication, males 2615.
- Zonocyba**,
 new genera, Europe 4935.
- Zoogeography**,
 Anopheles 6479.
 autecology, Halilidae, Demark 5516.
 caves, surveys, Invertebrata, Barbados, Coles Cave 5439.
 check lists, Opinae, Microgasterinae, Hungary 8687.
Drosophilidae, Australia 8705.
 environmental effects, habitat, community composition, Odonata, Lesser Antilles 1569.
Eumenes pedunculatus, *Eumenes coarctatus*, *Eumenes coronatus*, *Eumenes papillarius*, Finland, USSR 7893.
 geographical distribution, Hilaire, USSR 7905.
 geographical distribution, Lepidoptera, Canada, Alberta 7916.
 geographical distribution, Microproctera 7974.
 geographical distribution, origin, islands, Coccidea, Indian Ocean, West 4708.
 geographical distribution, species composition, Austria, Tyrol, Lepidoptera 7068.
 Geotrupes, Nepal 807.
 historical account, *Dicera herbsti*, Europe 3983.
 intraspecific relationships, variations, morphology, *Decticus verrucivorus*, *Decticus albifrons* 4701.
 Myliacina, Nearctic Region 4742.
 Prosmidites, Africa 7168.
 records, species composition, Heteroptera, Auchenorrhyncha, Norway 7898.
 species composition, alpine environments, Rhopalocera, USSR, Tadzhikistan 7071.
 species composition, Coelotes, Switzerland 7900.
Tettigonia viridissima, *Tettigonia cantans*, German Dem. Rep. 7904.
 Tipulidae, Iberia peninsula 9469.
- Zoophthora**,
 incidence, dead larvae, measuring techniques, *Hypera postica* 8010.
- Zoophthora phytonomi**,
 pathogens, detection, methodology, *Hypera postica* 4095.
- Zoophthora radicans**,
 pathogens, biological control, host-parasite interactions, *Thymelicus lineola* 3420.
- Zooplankton**,
Daphnia pulicaria, predation, feeding behavior, *Chaoborus trivittatus*, larvae 2001.
 predator-prey interactions, feeding, *Chaoborus*, mathematical models 4655.
 species composition, predation, *Chaoborus americanus*, USA, Michigan 583.
- Zoutermonopis angusticollis**,
 lipid metabolism, linoleic acid biosynthesis 6564.
- Zulia enteriana**,
 population dynamics, pest attack, Brachiaria, Brazil 6158.
- Zumptinae**,
 new families, morphology, taxonomy 2382.
- Zygaena**,
 integument, ultrastructure, secretions 6595.
 sex pheromone, attractancy, chemical communication 5116.
 systematics 4049.
- Zygaena araxis kurdii**,
 new subspecies, taxonomy, morphology, Turkey 4051.
- Zygaena ephialtes**,
 new records, geographical distribution, Greece 4732.
 sex pheromone, attractancy, chemical communication 5116.
- Zygaena hippocrepidis**,
 sex pheromone, attractancy, chemical communication 5116.
- Zygaena loniceræ**,
 host plants, British Isles 5224.
- Zygaena purpuralis**,
 taxonomy, synonymy, *Sphinx purpuralis* 4044.
- Zygaena transalpina alpina**,
 intraspecific hybridization, *Yaena transalpina tivaenta* 9421.
- Zygaena trifolii decreta**,
 population decline, interspecific relationships, host plants, *Zygaena loniceræ*, British Isles 5224.
- Zygaenodini**,
 taxonomy, new taxa, Japan 1608.
- Zyginidia scutellaris**,
 food quality, food consumption, oviposition, nutrient utilization 3547.
- Zygonyx torrida insulana**,
 new subspecies, taxonomy, morphology, Mauritius 7906.
- Zygothylus simplex**,
 association, species composition, Insecta, Arachnida, Namibia, Namib Desert 9160.
- Zygoptera**,
 defense mechanisms, parasites, feeding behavior, *Arrenurus* 6762.
 infestation, parasites, *Arrenurus* 4381.
 temperature effects, emergence, USA, Mississippi 750.
- Zygotes**,
 proteinase, inactivation, *Plasmodium gallinaceum*, *Aedes aegypti* 8126.
- Zygrita diva**,
 host-parasite interactions, legumes 695.
- Zyra**,
 surveys, geographical distribution, Mongolia, People's Rep. 3934.



cambridge scientific abstracts

ABSTRACTS JOURNALS ☐ ONLINE ☐ MAGNETIC TAPE

JOURNALS

Animal Behavior Abstracts

Aquatic Sciences & Fisheries Abstracts:

Part 1 - Biological sciences & living resources

Part 2 - Ocean technology, policy & non-living resources

Biochemistry Abstracts:

Part 1 - Biological Membranes

Part 2 - Nucleic Acids

Part 3 - Amino-acids, Peptides & Proteins

Calcified Tissue Abstracts

Chemoreception Abstracts

Computer & Information Systems Abstracts Journal

Conference Papers Index

Ecology Abstracts

Electronics & Communications Abstracts Journal

Entomology Abstracts

Genetics Abstracts

Immunology Abstracts

ISMEC (Information Service in Mechanical Engineering) Bulletins

Microbiology Abstracts

Part A - Industrial & Applied

Part B - Bacteriology

Part C - Algology, Mycology & Protozoology

Oceanic Abstracts

Pollution Abstracts

Safety Science Abstracts Journal

Science Research Abstracts Journal

Solid State Abstracts Journal

Toxicology Abstracts

Virology Abstracts

BACK VOLUMES

Back volumes are available for all CSA journals more than one year old, in either printed or microfiche form.

MAGNETIC TAPE

The CSA journals are available on magnetic tape in machine-readable form for current awareness and retrospective batch searching. Contact CSA Marketing Department for specifications and prices at 301-951-1403.

ONLINE

Some of the above journals are available on differing online information systems including:

- ☐ DIALOG® Information Retrieval Service
- ☐ Bibliographic Retrieval Service
- ☐ Information Retrieval Service (European Space Agency)
- ☐ System Development Corporation Search Service.

For further details contact CSA Database Services, toll free at 800-638-8076. In Maryland and outside continental U.S., call 301-951-1300.

Entomology
Abstracts